NACOmatic

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INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS

ABERDEEN PROVING GROUND, MD

PHILLIPS AAF (KAPG) ..... **NDB Rwy 22**
VOR Rwy 22
VOR/DME Rwy 22
RNAV (GPS) Rwy 22

NA when control tower closed.

ABINGDON, VA

VIRGINIA HIGHLANDS ..... **LOC Rwy 24**
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 24
VOR/DME-B

NA when local weather not available.
Category C, 800-2¼, Category D, 800-2½.

ANNAPOLIS, MD

LEE ..... **RNAV (GPS)-A**

NA when local weather not available.

BALTIMORE, MD

BALTIMORE-WASHINGTON INTL
THURGOOD MARSHALL **ILS or LOC Rwy 15L[1]**
ILS or LOC Rwy 28[2]
VOR Rwy 10[3]

[1]ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼.
[3]Categories A,B,1100-2;Category C,D 1100-3.

MARTIN STATE ..... **ILS or LOC Rwy 33[123]**
LOC Rwy 15[2]
VOR/DME or TACAN Z Rwy 15[4]

[1]ILS, Category D, 700-2.
[2]NA when control tower closed.
[3]NA when local weather not available.
[4]Categories A,B, 900-2; Category C, 900-2½; Category D 900-2¾.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY
EXECUTIVE ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

NAME ALTERNATE MINIMUMS

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-
ALBEMARLE .....**ILS or LOC Rwy 3[12]**
RNAV (GPS) Rwy 3[34]
RNAV (GPS) Y Rwy 21[35]
RNAV (GPS) Z Rwy 21[34]

[1]NA when control tower closed.
[2]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 1000-3. LOC, Category C, 800-2¼; Category D, 1000-3.
[3]NA when local weather not available.
[4]Category D, 1000-3.
[5]Category C, 800-2¼; Category D, 1000-3.

COLLEGE PARK, MD

COLLEGE PARK ..... **RNAV (GPS) Rwy 15**

NA when local weather not available.

CULPEPER, VA

CULPEPER RGNL ..... **LOC Rwy 4[1]**
RNAV (GPS) Rwy 4[2]
RNAV (GPS) Rwy 22[2]
VOR-A[2]

[1]NA when FBO closed.
[2]NA when local weather not available.

DANVILLE, VA

DANVILLE RGNL ..... **VOR Rwy 20**
Category C, 800-2¼; Category D, 800-2½.

DUBLIN, VA

NEW RIVER VALLEY ..... **VOR or GPS-A**
Category D, 800-2¼.

EASTON, MD

EASTON/
NEWNAM FIELD ..... **ILS or LOC/DME Rwy 4[1]**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33

NA when local weather not available.
[1]ILS,LOC, NA when control tower closed.

NAME ALTERNATE MINIMUMS

EMPORIA, VA

EMPORIA-
GREENSVILLE RGNL ..... **RNAV (GPS) Rwy 15**
NA when local weather not available.

FELKER AAF (KFAF)

FORT EUSTIS, VA.....ORIG 08297
NDB Rwy 14
COPTER NDB Rwy 14
RNAV (GPS) Rwy 14
COPTER RNAV (GPS) Rwy 14
NA when control tower closed.

FREDERICK, MD

FREDERICK MUNI ..... **RNAV (GPS) Rwy 5[1,2]**
RNAV (GPS) Y Rwy 23[1]
RNAV (GPS) Z Rwy 23[3]
[1]Category D, 800-2½.
[2]NA when local weather not available.
[3]Categories A,B,C,D, 800-2½.

GAITHERSBURG, MD

MONTGOMERY COUNTY
AIRPARK ..... **NDB Rwy 14**
Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

GALAX/HILLSVILLE, VA

TWIN COUNTY ..... **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19
NA when local weather not available.

GEORGETOWN, DE

SUSSEX COUNTY ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 22
NA when local weather not available.

HAGERSTOWN, MD

HAGERSTOWN RGNL-RICHARD A.
HENSON FIELD ..... **ILS or LOC Rwy 9[1]**
ILS or LOC Rwy 27[1]
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 27
VOR Rwy 9
NA when local weather not available.
[1]NA when control tower closed.

HOT SPRINGS, VA

INGALLS FIELD ..... **RNAV (GPS) Rwy 7**
NA when local weather not available.
Categories, A, B, 1000-2; Category C, 1000-2¾, Category D, 1000-3.

LEESBURG, VA

LEESBURG EXECUTIVE .. **RNAV (GPS) Rwy 17**
LPV, Category D, 700-2.

NAME ALTERNATE MINIMUMS

LEONARDTOWN, MD

ST. MARY'S COUNTY
RGNL ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

LOUISA, VA

LOUISA COUNTY/
FREEMAN FIELD ..... **RNAV (GPS) Rwy 27**
NA when local weather not available.

LYNCHBURG, VA

LYNCHBURG RGNL/PRESTON GLENN
FIELD ..... **ILS or LOC Rwy 4[1,2]**
RNAV (GPS) Rwy 4[3]
RNAV (GPS) Rwy 22[3]
VOR/DME Rwy 22[4]
VOR Rwy 4[3]
[1]ILS,LOC, NA when control tower closed.
[2]ILS,Categories A,B, 800-2;Category C,900-2½, Category D, 900-2¾. LOC,Category C,900-2½, Category D, 900-2¾.
[3]Category C, 900-2½; Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.

MANASSAS, VA

MANASSAS RGNL/HARRY P DAVIS
FIELD ..... **ILS or LOC Rwy 16L,**700-2
RNAV (GPS) Rwy 16L
NA when control tower closed.

MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE ..... **RNAV (GPS) Rwy 26**
NA when local weather not available.
Category C, 800-2¼.

MARTINSVILLE, VA

BLUE RIDGE ..... **RNAV (GPS) Rwy 30**
NA when local weather not available.
Categories A,B, 1000-2; Categories C,D, 1000-3.

MELFA, VA

ACCOMACK COUNTY ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Rwy 21
NA when local weather not available.

MIDDLETOWN, DE

SUMMIT ..... **RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWPORT NEWS, VA

NEWPORT NEWS/WILLIAMSBURG INTL ..... **ILS or LOC Rwy 7[12]**
ILS or LOC Rwy 25[1]
LOC/DME Rwy 20[12]
RNAV (GPS) Rwy 7[2]
RNAV (GPS) Rwy 20[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

OCEAN CITY, MD

OCEAN CITY MUNI ..... **RNAV (GPS) Rwy 2[1]**
RNAV (GPS) Rwy 32[12]
VOR-A[3]

[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

PETERSBURG, VA

DINWIDDIE COUNTY ..... **RNAV (GPS) Rwy 5**
RNAV (GPS) Rwy 23
VOR Rwy 23

NA when local weather not available.

RICHLANDS, VA

TAZEWELL COUNTY ..... **LOC/DME Rwy 25**
RNAV (GPS) Rwy 25

NA when local weather not available.

RICHMOND, VA

RICHMOND INTL ..... **ILS or LOC Rwy 16**

ILS, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3.
LOC, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI ..... **RNAV (GPS) Rwy 16**
VOR Rwy 16[1]

NA when local weather not available.
[1]Category C, 800-2¼, Category D, 800-2½.

NAME ALTERNATE MINIMUMS

ROANOKE, VA

ROANOKE RGNL/WOODRUM FIELD ..... **ILS or LOC Rwy 33[12]**
LDA Rwy 6[2]
VOR/NDB Rwy 33[3]

[1]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[2]Categories A,B, 1600-2; Categories C,D, 1600-3.
[3]Categories A,B, 1400-2; Categories C,D, 1400-3.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL ..... **ILS or LOC Rwy 32**
RNAV (GPS) Rwy 32
VOR Rwy 23[1]

NA when local weather not available.
[1]Categories A, B, 1100-2; Categories C, D, 1100-3.

STAUNTON-WAYNESBORO-HARRISONBURG, VA

SHENANDOAH VALLEY RGNL ..... **ILS or LOC Rwy 5[1]**
NDB Rwy 5
RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23

NA when local weather not available.
[1]ILS, Category D, 700-2.

SUFFOLK, VA

SUFFOLK EXECUTIVE ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 7

NA when local weather not available.

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY ..... **VOR/DME or TACAN Rwy 10**

Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

WASHINGTON, DC

WASHINGTON
DULLES INTL ..... **ILS or LOC/DME Rwy 1C[1]**
ILS or LOC/DME Rwy 1L[1]
ILS or LOC/DME Rwy 12[1]
ILS or LOC/DME Rwy 19C[1]
ILS or LOC/DME Rwy 19R[1]
ILS or LOC Rwy 1R[1]
ILS or LOC Rwy 19L[1]
RNAV (GPS) Y Rwy 19R[2]

[1]ILS, Categories A, B, C, D, 700-2.
[2]Category D, 800-2¼.

RONALD REAGAN
WASHINGTON NATIONAL ..... **ILS Rwy 1[1]**
LDA/DME Rwy 19[2]
RNAV (GPS) RWY 33[3]
ROSSLYN LDA Rwy 19, 1100-3
VOR/DME or GPS Rwy 15[4]
VOR/DME or GPS Rwy 19[5]
VOR Rwy 1[2]

[1]ILS, Categories A, B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.
[3]Categories A,B,C,D, 800-2½.
[4]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[5]Categories A,B, 1000-2; Categories C,D, 1000-3.

WEST POINT, VA

MIDDLE
PENINSULA RGNL ..... **RNAV (GPS) Rwy 10**
VOR-A

NA when local weather not available.

WILMINGTON, DE

NEW CASTLE ..... **ILS or LOC Rwy 1[12]**
RNAV (GPS) Rwy 1[2]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 19[2]
RNAV (GPS) Rwy 27[2]
VOR Rwy 1[23]
VOR Rwy 27[3]

[1]NA when contol tower closed.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

WINCHESTER, VA

WINCHESTER RGNL ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A

NA when local weather not available.

WISE, VA

LONESOME PINE ..... **RNAV (GPS) Rwy 6[12]**
RNAV (GPS) Rwy 24[3]

[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Category C, 800-2¼; Category D, 900-2¾.

ANDREWS AFB (KADW), (CAMP SPRINGS) MD (09127 USAF)

RADAR - (E) 113.1T 124.0 128.35 257.2 286.6 301.5 316.7 335.5 360.8 379.2 **ELEV 280**

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	1L[1]		AB	**760**/24	500	(500-½)
			C	**760**/40	500	(500-¾)
			D	**760**/50	500	(500-1)
			E	**760**/60	500	(500-1¼)
	19R[4]		AB	**780**/24	507	(500-½)
			CD	**780**/50	507	(500-1)
			E	**780**/60	507	(500-1¼)
	19L[2]		ABC	**720**/40	440	(500-¾)
			DE	**720**/50	440	(500-1)
	1R[1]		ABC	**760**/40	495	(500-¾)
			D	**760**/50	495	(500-1)
			E	**760**/60	495	(500-1¼)
CIR[3]	19L		A	**720**-1	440	(500-1)
			B	**740**-1	460	(500-1)
			C	**740**-1½	460	(500-1½)
			DE	**840**-2	560	(600-2)
	19R		AB	**780**-1	500	(500-1)
			C	**780**-1½	500	(500-1½)
			DE	**840**-2	560	(600-2)
	1L, 1R		AB	**760**-1	480	(500-1)
			C	**760**-1½	480	(500-1½)
			DE	**840**-2	560	(600-2)

[1]When ALS inop, increase CAT AB RVR 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles and CAT E vis to 1¾ miles. [2]When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,CAT C RVR to 60 and vis to 1¼ miles and CAT DE vis to 1½ miles. [3]Circling not authorized W of Rwy 1L-19R. [4]When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½.

DAVISON AAF (KDAA), VA (Ft. Belvoir) (Amdt 10A, 09211 USA) ELEV 73

RADAR[1] - (E) 118.85 119.95 248.5x 265.6 NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	32	3.0°/22/414	ABCD	**333**/40	265	(300-¾)
	14	3.0°/59/937	ABCD	**635**-2	575	(600-2)

[1]Opr 1100-2300Z++ wkd excld hol, R-IFF SIF svc not avbl.

NORFOLK NS (KNGU), (CHAMBERS FIELD), VA (09267 USN) ELEV 7

RADAR - (E) 119.2x 120.2x 279.525 322.525 335.8 353.55

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	10[23]	3.0°/50/948	ABCDE	**117**-¼	100	(100-¼)
	28[4]	3.0°/36/682	ABCDE	**265**-¾	250	(300-¾)
COPTER PAR[1]	10[23]	3.0°/50/948	COPTER	**117**-¼	100	(100-¼)
	28[4]	3.0°/36/682	COPTER	**265**-¾	250	(300-¾)
PAR W/O GS[1]	28[5]		ABCDE	**460**-1	445	(500-1)
	10[6]		ABC	**460**-¾	443	(500-¾)
			DE	**460**-1	443	(500-1)
ASR[1]	10[7]		AB	**520**-¾	503	(600-¾)
			CD	**520**-1	503	(600-1)
			E	**520**-1¼	503	(600-1¼)
	28[6]		ABC	**460**-1	445	(500-1)
			DE	**460**-1¼	445	(500-1¼)
CIR ASR[89]	10, 28		AB	**520**-1¼	503	(600-1¼)
			C	**520**-1½	503	(600-1½)
			DE	**580**-2	563	(600-2)
CIR PAR W/O GS[89]	10, 28		AB	**520**-1¼	503	(600-1¼)
			C	**520**-1½	503	(600-1½)
			DE	**580**-2	563	(600-2)

[1]No-NOTAM preventive maint Mon 1200-1800Z++. [2]When ALS inop, increase vis CAT ABCDE to ½ mile. [3]PAPI RRP and PAR RPI are not coincidental. [4]When ALS inop, increase vis CAT ABCDE to 1 mile. [5]When ALS inop, increase vis CAT ABCDE to 1¼ miles. [6]When ALS inop, increase vis CAT ABC to 1¼ miles, CAT DE to 1½ miles. [7]When ALS inop, increase vis CAT AB to 1¼ miles, CAT CD to 1½ miles, CAT E to 1¾ miles. [8]CAT E cir not authorized south of Rwy 10-28. [9]Norfolk NS Heliport lctd 1 NM NW, use caution in cir apch.

OCEANA NAS (KNTU), (APOLLO SOUCEK FIELD) VA (09351 USN) ELEV 23

RADAR - (E) 124.825 310.8 328.4 346.4 348.75 352.1 363.1 ▽

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[8]	5R[1]	3.0°/36/686	ABCDE	**120**-¼	100	(100-¼)
	23L[1]	3.0°/42/809	ABCDE	**122**-¼	100	(100-¼)
	5L	3.0°/40/753	ABCDE	**121**-½	100	(100-½)
	23R	3.0°/44/841	ABCDE	**121**-½	100	(100-½)
	32L[1]	3.0°/41/782	ABCDE	**123**-¼	100	(100-¼)
	14R	3.0°/38/711	ABCDE	**272**-1	250	(300-1)
PAR W/O GS[8]	14R		ABCDE	**360**-1¼	338	(400-1¼)
	5R[2]		ABCD	**420**-¾	400	(400-¾)
			E	**420**-1	400	(400-1)
	5L		ABCD	**420**-1¼	399	(400-1¼)
			E	**420**-1½	399	(400-1½)
	32L[4]		ABCDE	**360**-¾	337	(400-¾)
	23L[3]		ABC	**460**-¾	438	(500-¾)
			DE	**460**-1	438	(500-1)
	14R		ABCDE	**300**-1¼	278	(300-1¼)
	23R		ABC	**460**-1¼	439	(500-1¼)
			DE	**460**-1½	439	(500-1½)
PAR SIDESTEP[8]	32R		AB	**360**-1¼	339	(400-1¼)
			C	**360**-1½	339	(400-1½)
			DE	**360**-2	339	(400-2)
	14L		AB	**360**-1¼	340	(400-1¼)
			C	**360**-1½	340	(400-1½)
			DE	**360**-2	340	(400-2)
	5L		ABC	**420**-1½	399	(400-1½)
			DE	**420**-2	399	(400-2)
	23L		ABC	**460**-1½	438	(500-1½)
			DE	**460**-2	438	(500-2)
	23R		ABC	**460**-1½	439	(500-1½)
			DE	**460**-2	439	(500-2)
PAR W/O GS SIDESTEP[8]	5L		AB	**420**-1¼	399	(400-1¼)
			C	**420**-1½	399	(400-1½)
			DE	**420**-2	399	(400-2)
	32R		AB	**360**-1¼	339	(400-1¼)
			C	**360**-1½	339	(400-1½)
			DE	**360**-2	339	(400-2)
	14L		AB	**360**-1¼	340	(400-1¼)
			C	**360**-1½	340	(400-1½)
			DE	**360**-2	340	(400-2)
	23L		AB	**460**-1¼	438	(500-1¼)
			C	**460**-1½	438	(500-1½)
			DE	**460**-2	438	(500-2)
	23R		AB	**460**-1¼	439	(500-1¼)
			C	**460**-1½	439	(500-1½)
			DE	**460**-2	439	(500-2)

OCEANA NAS (KNTU), (Continued)

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	5R[5]		AB	**420**-½	400	(400-½)
			CD	**420**-¾	400	(400-¾)
			E	**420**-1	400	(400-1)
	5L		ABC	**400**-1	379	(400-1)
			DE	**400**-1¼	379	(400-1¼)
	32L[6]		AB	**440**-½	417	(500-½)
			CD	**440**-¾	417	(500-¾)
			E	**440**-1	417	(500-1)
	23L[7]		AB	**460**-½	438	(500-½)
			C	**460**-¾	438	(500-¾)
			DE	**460**-1	438	(500-1)
	14R		AB	**460**-1	438	(500-1)
			C	**460**-1¼	438	(500-1¼)
			DE	**460**-1½	438	(500-1½)
	14L		AB	**460**-1	440	(500-1)
			C	**460**-1¼	440	(500-1¼)
			DE	**460**-1½	440	(500-1½)
	23R		AB	**460**-1	439	(500-1)
			C	**460**-1¼	439	(500-1¼)
			DE	**460**-1½	439	(500-1½)
	32R		AB	**440**-1	419	(500-1)
			CD	**440**-1¼	419	(500-1¼)
			E	**440**-1½	419	(500-1½)
CIR	All Rwy		AB	**480**-1	457	(500-1)
ASR			C	**480**-1½	457	(500-1½)
			D	**580**-2	557	(600-2)
			E	**620**-2	597	(600-2)
CIR	All Rwy		ABC	**480**-1¾	457	(500-1¾)
PAR			D	**580**-2	557	(600-2)
			E	**620**-2¼	597	(600-2¼)
CIR	All Rwy		AB	**480**-1¼	457	(500-1¼)
PAR W/O GS			C	**480**-1½	457	(500-1½)
			D	**580**-2	558	(600-2)
			E	**620**-2	598	(600-2)

[1]When ALS inop, increase vis CAT ABCDE to ½ mile. [2]When ALS inop, increase vis CAT ABCD to 1¼ miles, CAT E to 1½ miles. [3]When ALS inop, increase CAT ABC to 1¼ miles, CAT DE to 1½ miles. [4]When ALS inop, increase vis CAT ABCDE to 1¼ miles. [5]When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles, CAT E to 1½ miles. [6]When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles, CAT E to 1½ miles. [7]When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles, CAT E to 1½ miles. [8]No-NOTAM preventive maintenance TUE 1030Z-1430Z++.

PATUXENT RIVER NAS (KNHK), (TRAPNELL FLD), MD (09267 USN) ELEV 39

RADAR - (E) 120.05 121.0 135.025 250.3 281.8 301.2 305.2 318.8 348.0 362.6

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	6[2]	3.0°/46/971	ABCDE	**139**-¼	100	(100-¼)
	24	3.0°/43/805	ABCDE	**120**-½	100	(100-½)
	14	3.0°/37/735	ABCDE	**127**-½	100	(100-½)
	32	3.0°/48/892	ABCDE	**268**-1	250	(300-1)
PAR W/O GS	6[4]		ABCD	**360**-½	321	(400-½)
			E	**360**-¾	321	(400-¾)
	14		ABCDE	**340**-1¼	313	(400-1¼)
	24		ABCDE	**320**-1¼	300	(400-1¼)
	32		ABCDE	**340**-1¼	322	(400-1¼)
ASR	14		ABC	**380**-1	353	(400-1)
			DE	**380**-1¼	353	(400-1¼)
	32		ABC	**400**-1	382	(400-1)
			DE	**400**-1¼	382	(400-1¼)
	6[3]		AB	**500**-½	461	(500-½)
			C	**500**-¾	461	(500-¾)
			D	**500**-1	461	(500-1)
			E	**500**-1¼	461	(500-1¼)
	24		AB	**440**-1	420	(500-1)
			CD	**440**-1¼	420	(500-1¼)
			E	**440**-1½	420	(500-1½)
CIR[5]	6-24, 14-32		A	**540**-1	501	(600-1)
			B	**560**-1	521	(600-1)
			C	**560**-1½	521	(600-1½)
			D	**600**-2	561	(600-2)
			E	**640**-2¼	601	(700-2¼)

[1]PAR No-NOTAM preventive maint period Wed 1300-1700Z++. [2]When ALS inop, increase Cat ABCDE vis to ½ mile. [3]When ALS inop, increase Cat AB vis to 1 mile, Cat C vis to 1¼ miles, Cat D vis to 1½ miles, Cat E vis to 1¾ miles. [4]When ALS inop, increase vis Cat ABCD to 1 mile, Cat E vis to 1¼ miles. [5]When circling from PAR W/O GS Rwy 14, 24, and 32, increase vis Cat AB to 1¼ miles.

QUANTICO MCAF (KNYG), (TURNER FIELD) VA (09295 USN) ELEV 11

RADAR[1] - 120.925 351.95 353.65 363.15

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[23]	2	3.0°/35/670	ABCD	**262**-1	252	(300-1)
PAR W/O GS[2]	2		ABCD	**400**-1¼	390	(400-1¼)
ASR[2]	2		AB	**560**-1	550	(600-1)
			C	**560**-1½	550	(600-1½)
			D	**560**-1¾	550	(600-1¾)
CIR PAR or PAR W/O GS[4]	2		A	**500**-1¼	490	(500-1¼)
			B	**540**-1¼	530	(600-1¼)
			C	**540**-1½	530	(600-1½)
			D	**700**-2¼	690	(700-2¼)
CIR[4]	2		AB	**560**-1	550	(600-1)
			C	**560**-1½	550	(600-1½)
			D	**700**-2¼	690	(700-2¼)

[1]GCA avbl daily during published field opr hr. Ctc twr for freq asgn. [2]Procedure NA at night when VGSI inop. [3]PAR military use only in other than VFR. [3]Circling not authorized W of Rwy 2-20.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

ABINGDON, VA

VIRGINIA HIGHLANDS

TAKE-OFF MINIMUMS: **Rwys 6, 24**, 300-1.

DEPARTURE PROCEDURE: Climb straight ahead to 5000 when departing NE, or 4000 when departing SW, before proceeding on course.

ANDREWS AFB/NAF (KADW)

CAMP SPRINGS, MD. 09127

TAKE-OFF OBSTACLES: **Rwy 1L,** trees 2972' to 3085' from DER, 765' to 906' right of centerline, 93' AGL/355' MSL. **Rwy 1R,** trees 1512' from DER, 856' right of centerline, 74' AGL/336' MSL; trees 2254' from DER, 645' left of centerline, 93' AGL/ 355' MSL; trees 2629' from DER, 1095' left of centerline, 93' AGL/355' MSL; trees 2882' from DER, 364' left of centerline, 104' AGL/ 362' MSL. **Rwy 19L,** terrain 267' from DER, 580' left of centerline, 261' MSL; trees 2650' to 2874' from DER, 946' to 1113' right of centerline, 91' AGL/334' MSL. **Rwy 19R,** trees 2650' to 2873' from DER, 887' to 1054' left of centerline, 91' AGL/334' MSL; tower 4630' from DER, 1664' right of centerline, 108' AGL/377' MSL.

NAME TAKE-OFF MINIMUMS

ANNAPOLIS, MD

LEE

TAKE-OFF MINIMUMS: **Rwy 30,** 300-1 or std. with a min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading to 700 before proceeding on course. **Rwy 30,** climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.

NOTE: **Rwy 12,** cross departure end of runway at or above 35' AGL/66' MSL. **Rwy 30,** trees, 1433' from departure end of runway, 85' left of centerline, 100' AGL/139' MSL. Cross departure end of runway at or above 35' AGL/66' MSL.

BALTIMORE, MD

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL

TAKE-OFF MINIMUMS: **Rwy 4,** 300-1½ or std. w/ min. climb of 210' per NM to 500.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 044° to 800 before proceeding on course. **Rwy 28,** climb heading 285° to 900 before proceeding on course. **Rwy 33L,** climb heading 320° to 2000 before proceeding on course. **Rwy 33R,** climb heading 005° to 1900 before proceeding on course.

NOTE: **Rwy 4,** rod on lighted pole 1921' from departure end of runway, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from departure end of runway, 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from departure end of runway, 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from departure end of runway, 481' right of centerline, 60' AGL/199' MSL. Tank 6635' from departure end of runway, 2265' right of centerline, 122' AGL/316' MSL. Tank 7534' from departure end of runway, 2274' left of centerline, 173' AGL/338' MSL. **Rwy 10,** building 52' from departure end of runway, 319' left of centerline, 13' AGL/133' MSL. **Rwy 15L,** multiple trees beginning 648' from departure end of runway, 617' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from departure end of runway, 618' left of centerline, 62' AGL/161' MSL. **Rwy 15R,** multiple trees beginning 1144' from departure end of runway, 740' right of centerline, up to 53' AGL/172' MSL. **Rwy 22,** terrain beginning 111' from departure end of runway, 29' right of centerline, up to 171' AGL. Terrain 365' from departure end of runway, 137' left of centerline, 158' MSL. **Rwy 28,** tree 1392' from departure end of runway, 736' left of centerline, 77' AGL/176' MSL. **Rwy 33L,** building 4693' from departure end of runway, 874' right of centerline, 127' AGL/266' MSL. Tree 2250' from departure end of runway, 843' right of centerline, 66' AGL/205' MSL. Microwave antenna on building, 4725' from departure end of runway, 907' right of centerline, 126' AGL/265' MSL. Fence 203' from departure end of runway, 517' right of centerline, 9' AGL/140' MSL. **Rwy 33R,** numerous trees beginning 2925' from departure end of runway, 321' left of centerline, up to 70' AGL/289' MSL. Numerous trees beginning 975' from departure end of runway, 116' right of centerline, up to 63' AGL/262' MSL. Light on pole 2384' from departure end of runway, 837' right of centerline, 55' AGL/254' MSL. Building 998' from departure end of runway, 654' left of centerline, 24' AGL/183' MSL. Light on pole 3869' from departure end of runway, 603' left of centerline, 72' AGL/251' MSL. Light on pole 2736' from departure end of runway, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from departure end of runway, 370' right of centerline, 40' AGL/242' MSL. Signal 2453' from departure end of runway, 904' left of centerline, 45' AGL/204' MSL.

BALTIMORE, MD (CON'T)

MARTIN STATE

TAKE-OFF MINIMUMS: **Rwy 15,** 800-2 or std. with a min. climb of 300' per NM to 1000. **Rwy 33**, 1300-2 or std. with a min. climb of 340' per NM to 1700'.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: **Rwy 15,** trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. **Rwy 33,** pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

AMDT 4 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** 400-1¼ or std. w/ min. climb of 563' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct PSK VORTAC to 3500 before proceeding on course. **Rwy 30,** climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: **Rwy 12,** bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. **Rwy 30,** trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139' MSL. Vehicle on road beginning 567' from departure end of runway, 310' left of centerline, 24' AGL/2137' MSL. Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2201' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL. Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL. Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL pole and antenna beginning 1149' from departure end of runway, 391' right of centerline, up to 40' AGL/2151' MSL.

BLACKSTONE, VA

ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: **Rwy 1,** 1000-2 or std. with a min. climb of 280' per NM to 1700. **Rwy 4,** 1000-2 or std. with a min. climb of 220' per NM to 1700. **Rwy 19,** NA.

DEPARTURE PROCEDURE: **Rwy 1,** climb heading 010° to 1700 before proceeding on course. **Rwy 4,** climb heading 039° to 1700 before proceeding on course. **Rwy 22,** climb heading 208° to 900 before proceeding on course. **Rwy 22,** climb heading 208° to 900 before proceeding on course.

NOTE: **Rwy 4,** 50' AGL tree, 150' from departure end of runway, 450' right of centerline. **Rwy 22,** 66' AGL tree, 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

BRIDGEWATER, VA

BRIDGEWATER AIRPARK

TAKE-OFF MINIMUMS: **Rwy 15**, 700-1. **Rwy 33**, 700-2.

DEPARTURE PROCEDURE: **All aircraft** climb in VBW holding pattern (SW, right turns, 035° inbound) to 4000 before proceeding on course.

BROOKNEAL, VA

BROOKNEAL/CAMPBELL COUNTY

NOTE: **Rwy 6,** multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL. **Rwy 24,** multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

CAMBRIDGE, MD

CAMBRIDGE-DORCHESTER

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1.

CAMP PEARY LNDG STRIP (KW94)

WILLIAMSBURG, VA 08213

TAKE-OFF OBSTACLES: **Rwy 5:** trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. **Rwy 23:** trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min. climb of 323' per NM to 1500, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course. **Rwy 21,** climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding on course.

NOTE: **Rwy 3,** pole 97' from DER, 476' right of centerline, 27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER, 3183' right of centerline, up to 1116' MSL.

CHASE CITY, VA

CHASE CITY MUNI

NOTE: **Rwy 18,** trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. **Rwy 36,** trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD

HARFORD COUNTY

TAKE-OFF MINIMUMS: **Rwy 28,** 300-1 or std. with a min. climb of 400' per NM to 600.

NOTE: **Rwy 28,** 100' terrain/trees 1150' from departure end of runway.

CLARKSVILLE, VA

LAKE COUNTRY RGNL

TAKE-OFF MINIMUMS: **Rwy 4,** 600-1 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 22,** climb runway heading to 1900 before turning.

CLINTON, MD

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG 08045 (FAA)

NOTES: **Rwy 5,** Vehicle on road beginning 20' from departure end of runway, on centerline, up to 15' AGL/261' MSL. **Rwy 23,** Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.

COLLEGE PARK, MD
COLLEGE PARK (CGS)
AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15,** 400-2¼ or std. w/ min. climb of 486' per NM to 600. **Rwy 33,** 400-2½ or std. w/ min. climb of 433' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 15,** climb heading 149° to 600 before proceeding on course. **Rwy 33,** climb heading 329° to 600 before proceeding on course.

NOTE: **Rwy 15,** trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSL. Antenna 1.1 NM from departure end of runway, 149' left of centerline, 167' AGL/270' MSL. **Rwy 33,** terrain beginning 1 NM from departure end of runway, 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway, 467' right of centerline, 184' AGL/254' MSL. Tower 1.9 NM from departure end of runway, 1447' left of centerline, 255' AGL/405' MSL.

CRISFIELD, MD
CRISFIELD MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24,** NA-obstacles

DEPARTURE PROCEDURE: **Rwy 14,** climb via heading 142° to 900 before proceeding on course. **Rwy 32,** climb via heading 322° to 900 before proceeding on course.

CULPEPER, VA
CULPEPER RGNL (CJR)
ORIG 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 22,** climb heading 218° to 1000 before turning right.

NOTE: **Rwy 4,** tree 79' from departure end of runway, 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410' MSL. **Rwy 22,** tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD
GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 1700-2 or std. with a min. climb of 300' per NM to 3400. **Rwy 11,** 1600-2 or std. with a min. climb of 520' per NM to 3400. **Rwy 23,** 1200-2 or std. with a min. climb of 660' per NM to 3400. **Rwy 29,** NA.

DEPARTURE PROCEDURE: **Rwys 5,11,** climb runway heading to 3400 before proceeding on course. **Rwy 23,** climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

DANVILLE, VA
DANVILLE RGNL

TAKE-OFF MINIMUMS: **Rwys 2, 31,** 300-1 or std. with a min. climb of 240' per NM to 1000.

DAVISON AAF (KDAA)
FORT BELVOIR, VA

. . . . . .Rwy 32, 300-1*

* Or standard with minimum climb of 380/NM to 500.

TAKE-OFF OBSTACLES: Rwy 32, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

DOVER AFB (KDOV)
DOVER, DE 09155

TAKE-OFF OBSTACLES: **Rwy 1,** possible aircraft/vehicles at DER hammerhead just left of rwy centerline, up to 65' AGL/91' MSL. **Rwy 19,** possible aircraft/vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. Rwy 32, multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL. Bldg 3900' from DER, 760' left of centerline, 88' AGL/119' MSL. Possible taxiing aircraft/vehicles on taxilane Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL. Possible large aircraft 2800' from DER, on taxiway Golf just left of centerline, up to 65' AGL/92' MSL.

DOVER/CHESWOLD, DE
DELAWARE AIRPARK

NOTE: **Rwy 9,** multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149' MSL. Pole line 1151' from departure end of runway, 36' right of centerline, 50' AGL/99' MSL. Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. **Rwy 27,** multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100' AGL/164' MSL.

DUBLIN, VA
NEW RIVER VALLEY (PSK)
AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24,** 200-1½ or std. w/ min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course. **Rwy 24**, climb heading 238° to 4000 before proceeding on course.

NOTE: **Rwy 6,** tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. **Rwy 24,** pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL. Terrain 68' from DER, 281' right of centerline, up to 2116' MSL.

EASTON, MD

EASTON/NEWNAM FIELD

TAKE-OFF MINIMUMS: **Rwy 22,** 300-2 or std. w/ climb of 241' per NM to 500.

NOTE: **Rwy 4,** vehicles on roads beginning 199' from departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of runway, 38' left of centerline, 47' AGL/116' MSL. **Rwy 15,** fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning 721' from departure end of runway, 183' left of centerline, up to 64' AGL/123' MSL. Multiple poles beginning 828' from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline, up to 89' AGL/148' MSL. Multiple trees beginning 1357' from departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. **Rwy 22,** tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL. Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. **Rwy 33,** multiple trees 10' from departure end of runway, 19' right of centerline, up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

ELKTON, MD

CECIL COUNTY

TAKE-OFF MINIMUMS: NOTE: **Rwy 13,** cross departure end of runway at or above 27' AGL/89' MSL. **Rwy 31,** 300-1½ or std. w/ min. climb of 290' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 31,** climb heading 308° to 900 before turning left.

NOTE: **Rwy 13,** trees 185' from departure end of runway, 110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. **Rwy 31,** trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100' AGL/309' MSL.

EMPORIA, VA

EMPORIA-GREENSVILLE RGNL (EMV)

ORIG 09155 (FAA)

NOTE: **Rwy 15,** vehicle on roadway 21' from DER, 291' left of centerline, up to 15' AGL/124' MSL. Trees beginning 56' from DER, 245' right of centerline, up to 60' AGL/169' MSL. Trees beginning 98' from DER, 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387' from DER, 387' left of centerline, up to 60' AGL/149' MSL. **Rwy 33,** trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline, up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER, 524' right of centerline, up to 15' AGL/144' MSL. Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

FARMVILLE, VA

FARMVILLE RGNL (FVX)

ORIG 07354 (FAA)

NOTE: **Rwy 3,** tree 1335' from departure end of runway, 277' right of centerline, 59' AGL/476' MSL. **Rwy 21,** vehicle on road 18' from departure end of runway, 495' left of centerline, 15' AGL/425' MSL. Tree 675' from departure end of runway, 315' right of centerline, 42' AGL/452' MSL.

FELKER AAF (KFAF),

FORT EUSTIS, VA 08297

Rwy 14, 32 standard.

TAKE-OFF OBSTACLES: **Rwy 14:** Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL. **Rwy 32:** Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186' left of centerline up to 74' AGL/85' MSL.

FORT MEADE (ODENTON), MD

TIPTON

NOTE: **Rwy 10,** cross departure end of runway at or above 17' AGL/167' MSL. **Rwy 10,** trees 1052' right of departure end of runway, 88' AGL/238' MSL.

FRANKLIN, VA

FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

AMDT 2 09071 (FAA)

NOTE: **Rwy 9,** trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. **Rwy 27,** trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44' MSL.

FREDERICK, MD

FREDERICK MUNI

TAKE-OFF MINIMUMS: **Rwy 12**, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 2000 before proceeding on course. **Rwy 30,** climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.

FREDERICKSBURG, VA

SHANNON

TAKE-OFF MINIMUMS: **Rwy 24,** 800-3 or std. with a min. climb of 290' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 24,** climb to 800 via runway heading before proceeding on course.

NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

FRIENDLY, MD

POTOMAC AIRFIELD

TAKE-OFF MINIMUMS: **Rwys 6,24,** 300-1.

NOTE: **Rwy 6,** 50' AGL trees 300' left of departure end of runway. 75' AGL trees 320' right of departure end of runway. **Rwy 24,** 80' AGL trees 200' right of departure end of runway. 75' AGL trees 200' left of departure end of runway. 30' AGL hanger 200' from departure end of runway, 190' right of centerline.

FRONT ROYAL, VA

FRONTROYAL-WARREN COUNTY

TAKE-OFF MINIMUMS: **Rwy 9,** std. w/ min. climb of 409' per NM to 1100, or 2300-3 for climb in visual conditions. **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** climbing left turn via MRB R-216 to MRB VORTAC before proceeding on course, do not exceed 180 knots until MRB VORTAC; or for climb in visual conditions: cross Front Royal-Warren County Airport at or above 2900 MSL before proceeding on course.

NOTE: **Rwy 9,** multiple trees beginning 148' from departure end of runway, 99' right of centerline, up to 100' AGL/939' MSL. Multiple trees beginning 182' from departure end of runway, 189' left of centerline, up to 100' AGL/854' MSL.

GAITHERSBURG, MD

MONTGOMERY COUNTY AIRPARK

TAKE-OFF MINIMUMS: NOTE: **Rwy 14,** 62' AGL trees 197' right of centerline. **Rwy 32,** 63' AGL trees 335' left of centerline.

GALAX-HILLSVILLE, VA

TWIN COUNTY

TAKE-OFF MINIMUMS: **Rwy 19,** 300-1 or std. with a min. climb of 240' per NM until passing 3000. **Rwy 1,** 300-1 or std. with a min. climb of 310' per NM until passing 3000.

GEORGETOWN, DE

SUSSEX COUNTY

TAKE-OFF MINIMUMS: **Rwys 4, 13, 22, 31,** 300-1.

GRUNDY, VA

GRUNDY MUNI

TAKE-OFF MINIMUMS: **Rwy 22,** 300-2 or std. with a min. climb of 240' per NM to 2700.

HAGERSTOWN, MD

HAGERSTOWN RGNL -RICHARD A. HENSON FIELD

TAKE-OFF MINIMUMS: **Rwy 2**, 300-1.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. **Rwys 2, 20**, climb to 2000 before turning eastbound.

HOT SPRINGS, VA

INGALLS FIELD

TAKE-OFF MINIMUMS: **Rwy 7,** 500-1 or std. with a min. climb of 320' per NM to 4400. **Rwy 25**, 600-1 or std. with a min. climb of 390' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 7,** climb runway heading to 4400 before proceeding on course. **Rwy 25,** climb runway heading to 5000 before proceeding on course.

INDIAN HEAD, MD

MARYLAND

TAKE-OFF MINIMUMS: **Rwy 36,** 300-1¼ or std. w/ min. climb of 360' per NM to 600.

NOTE: **Rwy 18,** trees abeam departure end of runway, 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGL/256' MSL. Trees abeam departure end of runway, 125' right of centerline, up to 100' AGL/256' MSL. Tower 6170' from departure end of runway, 620' right of centerline, 190' AGL/384' MSL. **Rwy 36,** trees 258' from departure end of runway, 309' left of centerline, up to 100' AGL/271' MSL. Tree 567' from departure end of runway, 125' left of centerline, 60' AGL/230' MSL. Rising terrain beginning 73' from departure end of runway, 64' right of centerline, 180' MSL.

JONESVILLE, VA

LEE COUNTY

TAKE-OFF MINIMUMS: **Rwy 7,** std. w/ min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions. **Rwy 25,** std. w/ min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 7, 25,** for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

NOTE: **Rwy 7,** terrain 116' from departure end of runway, 72' right of centerline, 1439' MSL. Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSL.

LANGLEY AFB (KLFI)
HAMPTON, VA
..... Orig 07354
..... **Rwy 8**, 500-3*
* Or standard with minimum climb of 240 ft/NM to 700.
NOTE: Rwy 26, cross DER at or above 10' AGL/18' MSL.
TAKE-OFF OBSTACLES: **Rwy 8**, Boat 2261' from DER, 779' left of centerline, 60' AGL/80' MSL. Boat 2500' from DER, 59' left of centerline, 60' AGL/70' MSL. Vehicle on road 1051' from DER, 702' right of centerline, 15' AGL/43' MSL. Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL. Multiple towers 2.0 NM from DER, 1.7 NM right of centerline, 503' AGL/511' MSL. Rwy 26, Tree 4050' from DER, 685' left of centerline, 100' AGL/120' MSL. Tree 4840' from DER, 687' left of centerline,100' AGL/136' MSL. Tree 4044' from DER, 31' left of centerline, 101' AGL/113' MSL. Tree 4153' from DER, 342' right of centerline, 101' AGL/114' MSL. Tree 4037' from DER, 623' right of centerline, 101' AGL/110' MSL. Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER, 1184' right of centerline, 100' AGL/133' MSL.

LAUREL, DE
LAUREL
DEPARTURE PROCEDURE: **Rwys 15, 33,** climb runway heading to 1200 before proceeding on course.

LAWRENCEVILLE, VA
LAWRENCEVILLE/BRUNSWICK MUNI
TAKE-OFF MINIMUMS: **Rwys 6,24,** NA.
NOTE: **Rwy 18,** trees 1654' from departure end of runway, 772' left of centerline, 88' AGL/407' MSL. Trees 200' from departure end of runway, on centerline, 22' AGL/321' MSL. **Rwy 36,** trees 1487' from departure end of runway, 20' left of centerline, 88' AGL/420' MSL. Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG, VA
LEESBURG EXECUTIVE (JYO)
AMDT 1 09183 (FAA)
DEPARTURE PROCEDURE: **Rwy 35,** climb heading 351° to 900 before proceeding on course.
NOTE: **Rwy 17,** building 167' from DER, 360' left of centerline, 22' AGL/401' MSL. Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL. **Rwy 35,** terrain 96' from DER, 453' left of centerline, 381' MSL. Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Trees 682' from DER, 333' right of centerline, up to 100' AGL/459' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

LEONARDTOWN, MD
ST. MARY'S COUNTY RGNL
NOTES: **Rwy 11,** multiple trees beginning 88' from departure end of runway, 339' left of centerline, up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. **Rwy 29,** multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline, 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

LOUISA, VA
LOUISA COUNTY/FREEMAN FIELD (LKU)
ORIG 08157 (FAA)
NOTE: **Rwy 9,** trees beginning abeam departure end of runway, 369' right of centerline, up to 100' AGL/589' MSL. Trees beginning 226' from departure end of runway, 541' left of centerline, up to 100' AGL/559' MSL. Trees beginning 1200' from departure end of runway, left and right of centerline, up to 100'AGL/539'MSL. **Rwy 27,** trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/569' MSL. Trees beginning 211' from departure end of runway, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 69' from departure end of runway, 513' left of centerline, up to 100' AGL/569' MSL. Trees beginning 586' from departure end of runway, left and right of centerline, up to 100' AGL/549' MSL.

LURAY, VA
LURAY CAVERNS
TAKE-OFF MINIMUMS: **Rwys 4, 22**, 1000-3
DEPARTURE PROCEDURE: Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on course.

LYNCHBURG, VA
FALWELL
TAKE-OFF MINIMUMS: **Rwy 10,** 1100-2½ for climb in visual conditions. **Rwy 28,** NA-obstacle.
DEPARTURE PROCEDURE: **Rwy 10,** for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.
NOTE: **Rwy 10,** multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway, 1192' right of centerline, up to 149' AGL/968' MSL.

LYNCHBURG, VA (CON'T)

LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)
AMDT 8 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17,** 300-2¼ or std. w/ min. climb of 232' per NM to 1500. **Rwy 35,** std. w/ min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 036° to 2200 before proceeding on course. **Rwy 17,** climb heading 169° to 1800 before turning right. **Rwy 22,** climb heading 216° to 1800 before turning right. **Rwy 35,** climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Field at or above 2500' MSL before proceeding on course.

NOTE: **Rwy 4,** trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway, 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/ 948' MSL. Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL. Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL. **Rwy 17,** trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/1195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. **Rwy 22,** trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/ 979' MSL. Poles beginning 2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. **Rwy 35,** trees beginning 2955' from departure end of runway, 140' right of centerline up to 96' AGL/ 1014' MSL. Trees beginning 722' from departure end of runway, 71' left of centerline up to 119' AGL/1037' MSL. Pole 36' from departure end of runway 98' left of centerline, 25' AGL/ 943' MSL.

MANASSAS, VA

MANASSAS RGNL/HARRY P. DAVIS FIELD

NOTE: **Rwy 16R,** terrain 64' from departure end of runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL. Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway, 40' left of centerline, up to 100' AGL/279' MSL. **Rwy 16L,** terrain 56' from departure end of runway, 177' left of centerline, 179' MSL. Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL. Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. **Rwy 34R,** sign 70' from departure end of runway, 91' right of centerline, 6' AGL/ 196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL. **Rwy 34L,** terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68' AGL/274' MSL.

MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1. **Rwy 26,** 800-1.

DEPARTURE PROCEDURE: **Rwy 8**, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. **Rwy 26**, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

MARTINSVILLE, VA

BLUE RIDGE (MTV)
AMDT 2A 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 240' per NM to 2100. **Rwy 30**, 300-1 or std. with a min. climb of 370' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 12,** climb direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course. **Rwy 30,** climbing right turn direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course.

NOTE: **Rwy 12,** trees 38' from departure end of runway, 380' right of centerline, 82' AGL/941' MSL. Trees 316' from departure end of runway, 320' left of centerline, 56' AGL/956' MSL.

MELFA, VA

ACCOMACK COUNTY

NOTE: **Rwy 3,** multiple trees beginning 41' from departure end of runway, 221' right of centerline, up to 84' AGL/128' MSL. Truck on road 204' from departure end of runway, 231' left of centerline, 15' AGL/61' MSL. Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL. Truck on road 494' from departure end of runway, 228' left of centerline, 15' AGL/62' MSL. Rod on obstruction light tower 862' from departure end of runway, 402' left of centerline, 55' AGL/99' MSL. **Rwy 21,** multiple trees beginning 27' from departure end of runway, 395' right of centerline, up to 91' AGL/135' MSL. Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSL.

MIDDLETOWN, DE

SUMMIT

TAKE-OFF MINIMUMS: **Rwy 35**, 300-1, or std. with a min. climb of 280' per NM to 400.

MITCHELLVILLE, MD

FREEWAY

TAKE-OFF MINIMUMS: **Rwy 18,** 300-1 or std. with a min. climb of 295' per NM to 500. **Rwy 36,** 300-1 or std. with a min. climb of 500' per NM to 600.

NOTE: **Rwy 18,** trees 328' from departure end of runway, 20' AGL/178' MSL. Trees 838' from departure end of runway, 337' left of centerline, 50' AGL/220' MSL. **Rwy 36,** cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL. Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

MONETA, VA

SMITH MOUNTAIN LAKE

TAKE-OFF MINIMUMS: **Rwys 5, 23**, 300-1.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb straight ahead to 1600 before proceeding on course.

NEWPORT NEWS, VA

NEWPORT NEWS/WILLIAMSBURG INTL

TAKE-OFF MINIMUMS: **Rwy 20**, 300-1¼ or standard with a minimum climb of 255' per NM to 300.

NOTE: **Rwy 2,** bush 295' from departure end of runway, 291' right of centerline 22' AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/131' MSL. Pole 1221' from departure end of runway, 487' right of centerline 31' AGL/81' MSL. Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132' MSL. Multiple trees beginning 1554' from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161 MSL. **Rwy 7,** tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL. T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116'MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191' MSL. **Rwy 20,** bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL. Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. **Rwy 25,** tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of centerline 86' AGL/106' MSL. Tree 3435 from departure end of runway, 1125' right of centerline 116' AGL/139' MSL.

NORFOLK, VA

CHESAPEAKE RGNL

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 500 before proceeding on course.

NOTE: **Rwy 5,** cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. **Rwy 23,** cross departure end of runway at or above 25' AGL/43'MSL. Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

NORFOLK, VA (CON'T)

HAMPTON ROADS EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 217' per NM to 700, or alternatively w/ std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to departure end of runway or 1700-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 2,** climb heading 019° to 1600 before turning west. **Rwy 10,** climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course. **Rwy 20,** climb heading 199° to 1000 before turning North. **Rwy 28,** climb heading 282° to 1500 before turning North.

NOTE: **Rwy 2,** multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. **Rwy 10,** trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/192' MSL. **Rwy 20,** vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline, up to 100' AGL/124' MSL. Vehicle on road and multiple trees beginning 595' from departure end of runway, 8' right of centerline, up to 100' AGL/124' MSL. **Rwy 28,** multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL. Vehicle on road 3' from departure end of runway, 112' right of centerline, 17' AGL/34' MSL. Multiple trees beginning 2595' from departure end of runway, 362' right of centerline, up to 100' AGL/124' MSL.

NORFOLK, VA (CON'T)

NORFOLK INTL

NOTES: **Rwy 5,** mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSL. Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL. Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL, obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline, 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17'MSL. **Rwy 14,** tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL. **Rwy 23,** rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. **Rwy 32,** multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway, 135' left of centerline, up to 12' AGL/27' MSL.

NORFOLK NS (CHAMBERS FIELD)(KNGU)

NORFOLK, VA . . . . . .
08269

Rwy 28: 300-1½*

* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: **Rwy 10:** Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48' MSL.

OAKLAND, MD
GARRETT COUNTY (2G4)
ORIG 08101 (FAA)
NOTE: **Rwy 9,** Multiple trees beginning 75' from departure end of runway, 94' left of centerline, up to 100' AGL/2939' MSL. Multiple trees beginning 76' from departure end of runway, 47' right of centerline, up to 100' AGL/2939' MSL. **Rwy 27,** Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/3019' MSL. Multiple trees beginning 19' from departure end of runway, 107' right of centerline, up to 100' AGL/3019' MSL.

OCEAN CITY, MD
OCEAN CITY MUNI
TAKE-OFF MINIMUMS: **Rwys 2, 32**, 400-2 or std. with a min. climb of 260' per NM to 500.

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)
VIRGINIA BEACH, VA. 09351
TAKE-OFF OBSTACLES: **Rwy 5L,** Trees 115' MSL, 3706' from DER, 97' right of centerline. **Rwy 5R,** Trees 115' MSL, 3706' from DER, 603' left of centerline. **Rwy 14L,** Trees 105' MSL, 2792' from DER, 7' left of centerline. **Rwy 14R,** Trees 105' MSL, 2792' from DER, 708' left of centerline.

ORANGE, VA
ORANGE COUNTY
TAKE-OFF MINIMUMS: **Rwy 8**, 300-1.
DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1500 before turning.

PATUXENT RIVER NAS (TRAPNELL FIELD),(KNHK)
PATUXENT RIVER, MD 09267
Rwy 6, Obstacle identification surface begins 15' above DER.
Rwy 14, Obstacle identification surface begins 35' above DER.
Rwy 20, Obstacle identification surface begins 20' above DER.
Rwy 24, Obstacle identification surface begins 15' above DER.
TAKE-OFF OBSTACLES: **Rwy 6,** Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. **Rwy 14,** Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER. Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline. Trees 43' AGL/ 59' MSL, 520' from DER, 637' right of centerline. **Rwy 20,** Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/ 93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/ 104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of centerline. **Rwy 24,**
43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline. Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

PETERSBURG, VA
DINWIDDIE COUNTY (PTB)
ORIG 07354 (FAA)
TAKE-OFF MINIMUMS: **Rwys 32, 14,** NA-obstacles.
NOTE: **Rwy 5,** numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGL/254' MSL. Fence 161' from departure end of runway, 472' right of centerline, 7' AGL/196' MSL. Tree 1031' from departure end of runway, 690' right of centerline, 57' AGL/256' MSL. **Rwy 23,** numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway, 476' left of centerline, 10' AGL/ 199' MSL. Numerous trees beginning 819' from departure end of runway, 528' left of centerline, up to 72' AGL/281' MSL.

PHILLIPS AAF (KAPG)
ABERDEEN PROVING GROUND, MD . . 07270
TAKE-OFF OBSTACLES: **Rwy 4**, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL. Tree 1126' from DER, 118' left of centerline, 29' AGL/88' MSL. **Rwy 22**, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL. Multiple trees beginning 398' from DER, 311' right of centerline, up to 50' AGL/89' MSL. Tree 1094' from DER, 49' left of centerline, 43' AGL/62' MSL.

QUANTICO MCAF (TURNER FIELD) (KNYG)
QUANTICO, VA 09295
Diverse departures not authorized.
Rwy 2, 400-2½*
Rwy 20, 300-1¼**
* Or standard with minimum civil climb of 470 ft/NM to 600, minimum military climb of 410 ft/NM to 500.
** Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400.
DEPARTURE PROCEDURE: **Rwy 2,** Climbing right turn to 2000 direct BRV VORTAC or to assigned heading for radar vectors. **Rwy 20,** Climb to 2000 direct BRV VORTAC or as assigned for radar vectors.
TAKE-OFF OBSTACLES: **Rwy 2,** Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline. Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. **Rwy 20,** Terrain 27' MSL, starting 347' from DER, 192' right of centerline. Trees 34' AGL/213' MSL, 5749' from DER, 1878' right of centerline.

QUINTON, VA

NEW KENT COUNTY

NOTE: **Rwy 10,** trees beginning 358' from departure end of runway, 6' left of centerline, up to 100' AGL/169' MSL. Trees beginning 994' from departure end of runway, 602' right of centerline, up to 100' AGL/209' MSL. Trees beginning 1396' from departure end of runway, 389' left of centerline, up to 100' AGL/209' MSL. Trees beginning 3422' from departure end of runway, left and right of centerline, up to 100' AGL/239' MSL. **Rwy 28,** trees beginning 345' from departure end of runway, 296' right of centerline, up to 100' AGL/209' MSL. Trees beginning 367' from departure end of runway, 527' left of centerline, up to 100' AGL/209' MSL. Trees beginning 2134' from departure end of runway, left and right of centerline, 100' AGL/239' MSL.

RICHLANDS, VA

TAZEWELL COUNTY

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1 or std. with a min. climb of 430' per NM to 3000. **Rwy 25,** 300-1 or std. with a min. climb of 280' per NM to 2900.

DEPARTURE PROCEDURE: **Rwy 7,** climb runway heading to 4700 before proceeding southbound. **Rwy 25,** climb runway heading to 4100 before proceeding southbound.

RICHMOND, VA

CHESTERFIELD COUNTY

TAKE-OFF MINIMUMS: **Rwy 15,** 800-1 or std. with a min. climb of 280' per NM to 1200. **Rwy 33**, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 15,** climb runway heading to 1200' before proceeding on course. **Rwy 33**, climb runway heading to 1700' before proceeding on course.

NOTE: **Rwy 15,** 18' AGL pole 1315' from departure end of runway, 304' left of centerline. **Rwy 33,** 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

RICHMOND INTL

NOTE: **Rwy 2,** cross departure end of runway at or above 30' AGL/195' MSL. **Rwy 7,** cross departure end of runway at or above 34' AGL/223' MSL. **Rwy 16,** cross departure end of runway at or above 22' AGL/183' MSL. **Rwy 20,** cross departure end of runway at or above 35' AGL/193' MSL. **Rwy 25,** cross departure end of runway at or above 20' AGL/176' MSL. **Rwy 34,** cross departure end of runway at or above 10' AGL/177' MSL.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI (OFP)

ORIG 09239 (FAA)

NOTE: **Rwy 16,** treees beginning 48' from DER, 479' left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of centerline, up to 104' AGL/294' MSL. **Rwy 34,** road and trees beginning 149' from DER, 345' right of centerline, up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 386' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER, 445' right of centerline, up to 100' AGL/290' MSL. Trees beginning 2714' from DER, 487' right of centerline, up to 104' AGL/304' MSL.

RIDGELY, MD

RIDGELY AIRPARK

NOTE: **Rwy 12,** multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.

ROANOKE, VA

ROANOKE RGNL/ WOODRUM FIELD (ROA)

AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 33**, NA - obstacles. **Rwy 24,** std. w/ min. climb of 216' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 154° to intercept the ROA VORTAC R-122 to 4000 before proceeding on course. **Rwy 24**, climb west on I-SZK LDA localizer course on 4200 to DIXXY Int/I-SZK 15.25 DME before proceeding on course.

NOTE: **Rwy 15,** trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL. **Rwy 24,** bush 86' from departue end of runway, 385' left of centerline, 4' AGL/1163' MSL. Tree 150' from departure end of runway, 415' right of centerline, 60' AGL/1171' MSL. Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ORIG 07354 (FAA)

NOTE: **Rwy 5,** trees and antennas beginning 961' from departure end of runway, 49' left of centerline, up to 83' AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. **Rwy 23,** trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL. **Rwy 32,** trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline, up to 23' AGL/72' MSL. Trees beginning 2215' from departure end of runway, 140' left of centerline, up to 79' AGL/128' MSL.

SALUDA, VA
HUMMEL FIELD
DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before turning on course.
NOTE: **Rwy 1,** 23' AGL tree left of departure end of runway, 65' AGL tree 663' from departure end of runway, 129' left of centerline. **Rwy 19,** 26' AGL tree 237' from departure end of runway, 116' right of centerline.

SOUTH BOSTON, VA
WILLIAM M. TUCK
TAKE-OFF MINIMUMS: **Rwy 1,** 300-1. **Rwys 5, 23,** NA.
NOTE: **Rwy 1,** 72' AGL tower 324' from departure end of runway, 283' left of runway centerline.

SOUTH HILL, VA
MECKLENBURG-BRUNSWICK RGNL
TAKE-OFF MINIMUMS: **Rwy 1**, 300-1 or std. with a min. climb of 250' per NM to 1000. **Rwy 19,** 300-1 or std. with a min. climb of 370' per NM to 1000'
DEPARTURE PROCEDURE: **Rwys 1,19,** climb runway heading to 1000 before proceeding on course.

STAFFORD, VA
STAFFORD RGNL
DEPARTURE PROCEDURE: **Rwy 15,** climbing left turn to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. **Rwy 33,** climbing left turn to 2000, intercept and proceed via BRV R-306 to BRV VORTAC, before proceeding on course.
NOTE: **Rwy 33,** cross departure end of runway at or above 34' AGL/246' MSL.

STAUNTON-WAYNESBORO-HARRISONBURG, VA
SHENANDOAH VALLEY RGNL (SHD)
AMDT 6 09239 (FAA)
TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ min. climb of 273' per NM to 3800, or 2200-2½ for climb in visual conditions. **Rwy 23,** standard, or 2200-2½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 5**, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. **Rwy 23**, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.
NOTE: **Rwy 5,** trees 1720' from DER, 635' right of centerline, up to 100' AGL/1279' MSL. **Rwy 23,** tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.

STEVENSVILLE, MD
BAY BRIDGE
TAKE-OFF MINIMUMS: **Rwy 29,** 500-3 or std. w/ min. climb of 317' per NM to 800.
NOTE: **Rwy 11,** road 354' from departure end of runway, on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471' from departure end of runway, 32' left of centerline, up to 100' AGL/119' MSL. Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to 100' AGL/119' MSL. **Rwy 29,** twin bridges 2.25 NM from departure end of runway, 2767' right of centerline, 410' AGL/410' MSL.

SUFFOLK, VA
SUFFOLK EXECUTIVE
TAKE-OFF MINIMUMS: **Rwys 4, 7, 22,** 300-1. **Rwy 25,** 300-1 or std. w/ a min. climb o f260' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200' /NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.
NOTE: **Rwy 4,** trees 1050' from departure end of runway, 250' left of centerline, up to 100' AGL/169' MSL. Trees 1076' from departure end of runway, 105' left of centerline, up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169' MSL. Powerline 3056' from departure end of runway, 524' right of centerline, 105' AGL/174' MSL. **Rwy 7,** trees 1143' from departure end of runway, 688' left of centerline, up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105' AGL/169' MSL. Powerline 2176' from departure end of runway, 259' left of centerline, 105' AGL/169' MSL. Trees 2430' from departure end of runway, 118' right of centerline, up to 100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105' AGL/174' MSL. **Rwy 22,** road 536' from departure end of runway, 62' left of centerline, 15' AGL/84' MSL. Trees 1403' from departure end of runway, 765' left of centerline, up to100' AGL/169' MSL. Trees 3595' from departure end of runway, 792' right of centerline, up to 100' AGL/174' MSL. **Rwy 25,** road 198' from departure end of runway, 33' right of centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169' MSL. Trees 3258' from departure end of runway, 57' right of centerline, up to 100' AGL/174' MSL.

TANGIER, VA
TANGIER ISLAND (TGI)
ORIG 09015 (FAA)
NOTE: **Rwy 2,** vehicle on road 343' from departure end of runway, on centerline, 15' AGL/19' MSL. Boat masts 638' from departure end of runway, 632' right to 755' left of centerline, up to 63' MSL. **Rwy 20,** buildings beginning 7' from departure end of runway, 206' left of centerline, 45' AGL/50' MSL. Rock wall at departure end of runway, 57' right of centerline, 4' AGL/8' MSL.

TAPPAHANNOCK, VA
TAPPAHANNOCK-ESSEX COUNTY
TAKE-OFF MINIMUMS: **Rwy 10,** 300-1¼ or std. w/ min. climb of 303' per NM to 500. **Rwy 28,** 300-1 or std. w/ min. climb of 366' per NM to 500.
NOTE: **Rwy 10,** terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139' MSL. **Rwy 28,** terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY (WAL)
ORIG 09127 (FAA)

NOTE: **Rwy 4,** trees beginning 1254' from DER, 741' left of centerline, up to 100' AGL/109' MSL. Trees beginning 1814' from DER, 79' right of centerline, up to 100' AGL/134' MSL. **Rwy 10,** trees beginning 1252' from DER, 818' left of centerline, up to 100' AGL/124' MSL. **Rwy 17,** trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL. **Rwy 22,** trees beginning 793' from DER, 315' left of centerline, up to 100' AGL/129' MSL. **Rwy 28,** trees beginning 945' from DER, 495' right of centerline, up to 100' AGL/139' MSL. **Rwy 35,** trees beginning 3' from DER, 394' left of centerline, up to 100' AGL/124' MSL. Trees beginning 21' from DER, 219' right of centerline, up to 100' AGL/124' MSL.

WAKEFIELD, VA

WAKEFIELD MUNI

DEPARTURE PROCEDURE: Climb straight ahead to 500 before proceeding on course.

WARRENTON, VA

WARRENTON-FAUQUIER (HWY)
ORIG 09099 (FAA)

NOTE: **Rwy 15,** trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL. Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL. Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL. Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL. Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL. **Rwy 33,** trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGL/413' MSL.

WASHINGTON, DC

RONALD REAGAN WASHINGTON NATIONAL

TAKE-OFF MINIMUMS: **Rwy 22,** 400-2½ or std. with a min. climb of 210' per NM to 500. **Rwy 33**, 700-3 or std. with a min. climb of 260' per NM to 700. **Rwy 1**, 600-2 or std. with a min. climb of 370' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned. **Rwy 19,** climb heading 184° to 500 before turning right. **Rwy 33,** intercept DCA R-328. Climb to 5000 or as assigned.

NOTE: **Prohibited area, P-56, 1.5 NM north of airport.**

WASHINGTON DULLES INTL (IAD)
AMDT 1 08325 (FAA)

NOTE: **Rwy 1L,** tower 1918' from departure end of runway, 680' left of centerline, 56' AGL/330' MSL. **Rwy 1C,** tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL. **Rwy 1R,** post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL. **Rwy 12,** tree 520' from departure end of runway, 604' left of centerline, 28' AGL/307' MSL.

Rwy 30, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway, 600' right of centerline, up to 64' AGL/383' MSL.

WEST POINT, VA

MIDDLE PENINSULA RGNL (FYJ)
ORIG 08157 (FAA)

NOTE: **Rwy 10,** multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 28,** multiple trees beginning 33' from departure end of runway, left and right of centerline, up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline, 135' AGL/135' MSL.

WESTMINSTER, MD

CARROLL COUNTY RGNL/JACK B. POAGE FIELD

TAKE-OFF MINIMUMS: **Rwy 16**, 400-1 or std. with a min. climb of 210' per NM to 1300. **Rwy 34,** 300-1 or std. with a min. climb of 320' per NM to 1000.

NOTE: **Rwy 16,** 87' AGL trees 644' from departure end of runway. **Rwy 34,** 102' AGL trees 116' from departure end of runway, 220' right of centerline.

CLEARVIEW AIRPARK (2W2)
ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32,** 300-2¼ or std. w/ min. climb of 290' per NM to 1200.

NOTE: **Rwy 14,** vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL. Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL. **Rwy 32,** vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA

WILLIAMSBURG-JAMESTOWN

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.

WILMINGTON, DE

NEW CASTLE

TAKE-OFF MINIMUMS: **Rwy 19,** 300-1 or std. w/ min. climb of 266' per NM to 300.

NOTE: **Rwy 1,** multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGL/120' MSL, tree 1219' from departure end of runway, 482' right of centerline, 57' AGL/118' MSL, bush 118' from departure end of runway, 385' left of centerline, 4' AGL/65' MSL. **Rwy 9,** multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway, 66' left of centerline, 53' AGL/124' MSL, light pole 948' from departure end of runway, 596' right of centerline, 44' AGL/115' MSL, tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway, 457' left of centerline, 29' AGL/100' MSL. **Rwy 14,** obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL, rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL. **Rwy 19,** antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway, 850' right of centerline, 45' AGL/120' MSL, obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. **Rwy 27,** tree 697' from departure end of runway, 533' left of centerline, 68' AGL/147' MSL. Tree 1110' from departure end of runway, 584' right of centerline, 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/107' MSL, bush 408' from departure end of runway, 415' left of centerline, 12' AGL/91' MSL. **Rwy 32,** tree 711' from departure end of runway, 207' right of centerline, 29' AGL/104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

WINCHESTER, VA

WINCHESTER RGNL

TAKE-OFF MINIMUMS: **Rwy 32,** 800-2 or std. with a min. climb of 210' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 32,** climb runway heading to 1700 before turning on course.

WISE, VA

LONESOME PINE

TAKE-OFF MINIMUMS: **Rwy 24,** 1800-3 or std. with a min. climb of 400' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 6,** climb on runway heading to 3800 before proceeding on course.

Rwy 24, climb on runway heading to 4500 before proceeding on course.

LOC/DME I-VJI 108.3 Chan 20	APP CRS 241°	Rwy ldg 4471 TDZE 2087 Apt Elev 2087

LOC RWY 24

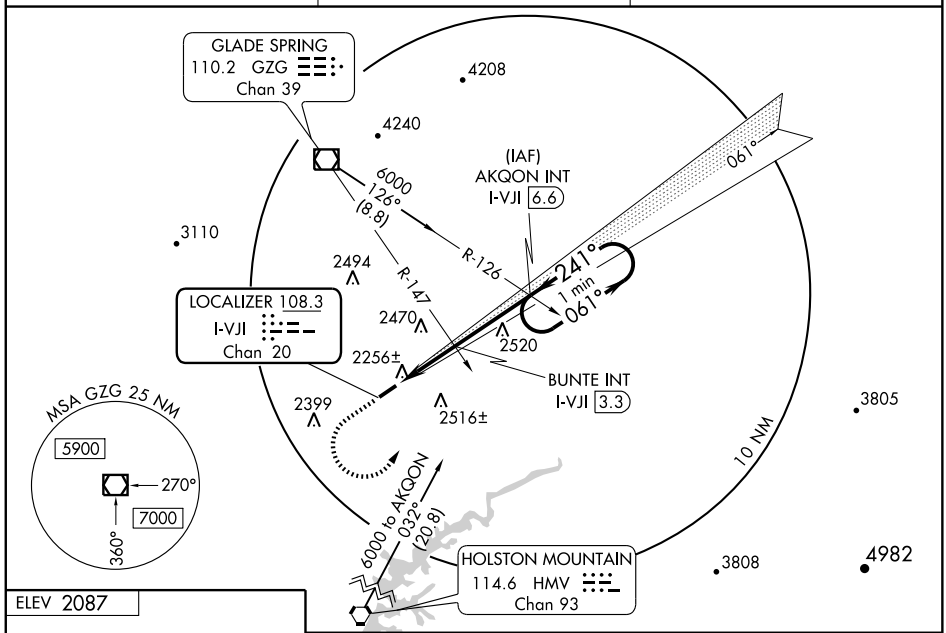
ABINGDON / VIRGINIA HIGHLANDS (VJI)

Inoperative table does not apply. Visibility reduction by helicopters NA. When local altimeter setting not received, use Tri-Cities Rgnl TN/VA altimeter setting and increase all MDA 140 feet; increase S-24 and Circling Cat. A visibility ¼ mile. S-24 and Circling Cat. C and D visibility ½ mile. Increase BUNTE FIX minimums S-24 Cats. C and D and Circling Cat. A visibility ¼ mile, and Circling Cat. C and D visibility ½ mile.

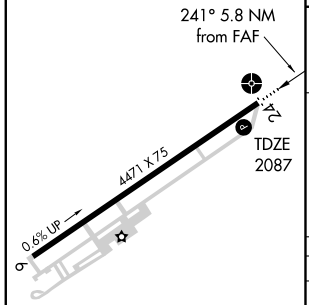
ODALS

MISSED APPROACH: Climb to 2900 then climbing left turn to 4300 via heading 030° and I-VJI NE course to AKQON INT/I-VJI 6.6 DME and hold.

AWOS-3	TRI-CITY APP CON	UNICOM
128.125	128.67 349.0	122.8 (CTAF) L



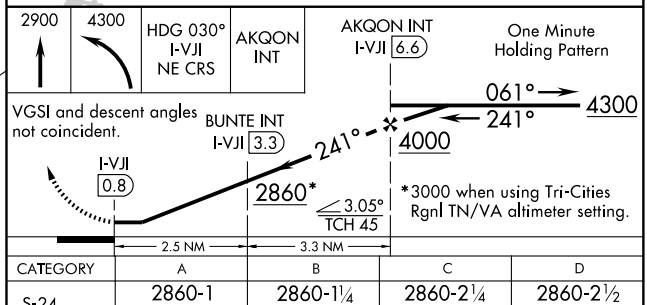
ELEV 2087



MIRL Rwy 6-24 L

REIL Rwy 24 L

FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56



CATEGORY	A	B	C	D
S-24	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)
CIRCLING	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)
BUNTE FIX MINIMUMS				
S-24	2520-1 433 (500-1)		2520-1¼ 433 (500-1¼)	2520-1½ 433 (500-1½)
CIRCLING	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)

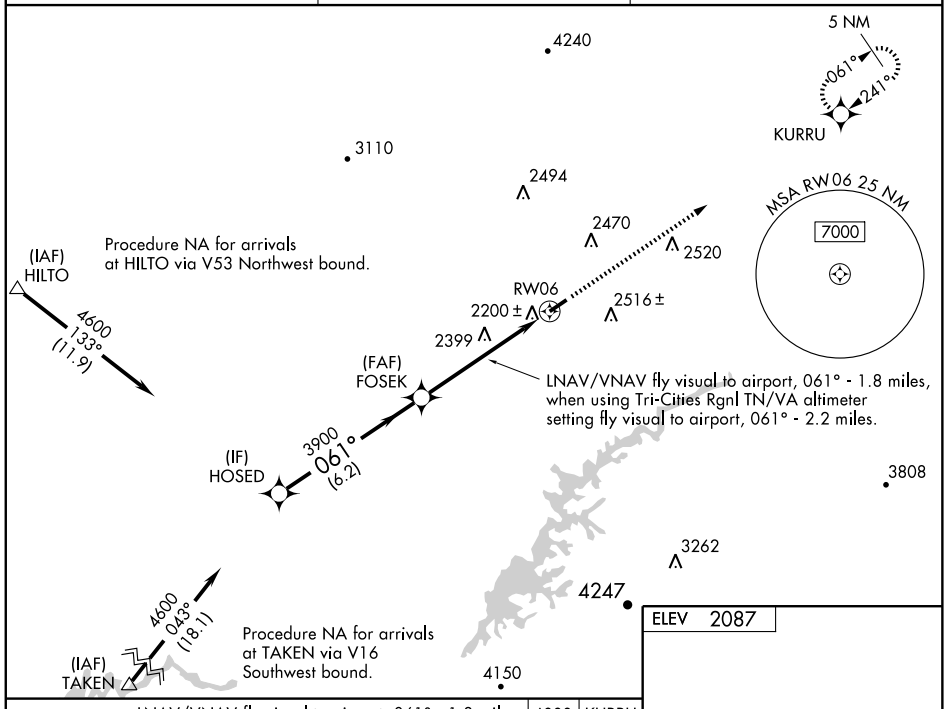
WAAS CH 82411 W06A	APP CRS 061°	Rwy ldg 4471 TDZE 2068 Apt Elev 2087

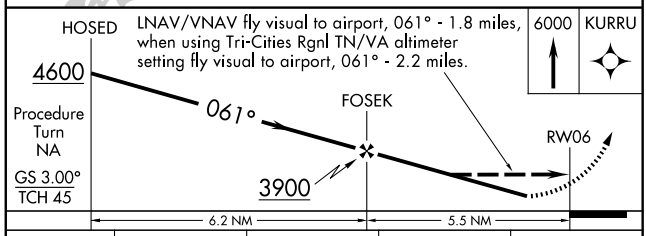
RNAV (GPS) RWY 6
ABINGDON / VIRGINIA HIGHLANDS (VJI)

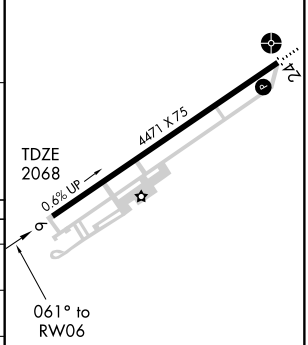
Baro-VNAV NA when using Tri-Cities Rgnl TN/VA altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 45°C (113°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Tri-Cities Rgnl TN/VA altimeter setting and increase all DA 131 feet and all MDA 140 feet, and increase LPV all Cats, LNAV Cats C and D, and Circling Cats. C and D visibility ½ mile, increase LNAV/VNAV Cat. D and Circling Cat. A visibility ¼ mile.

MISSED APPROACH: Climb to 6000 direct KURRU and hold, continue climb-in-hold to 6000.

AWOS-3	TRI-CITY APP CON	UNICOM
128.125	128.67 349.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2436-1¼ 368 (400-1¼)			
LNAV/VNAV DA	2669-2 601 (600-2)			
LNAV MDA	2660-1 592 (600-1)		2660-1½ 592 (600-1½)	2660-1¾ 592 (600-1¾)
CIRCLING	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)

MIRL Rwy 6-24 L
REIL Rwy 24 L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4471
241°	TDZE	2087
	Apt Elev	2087

RNAV (GPS) RWY 24

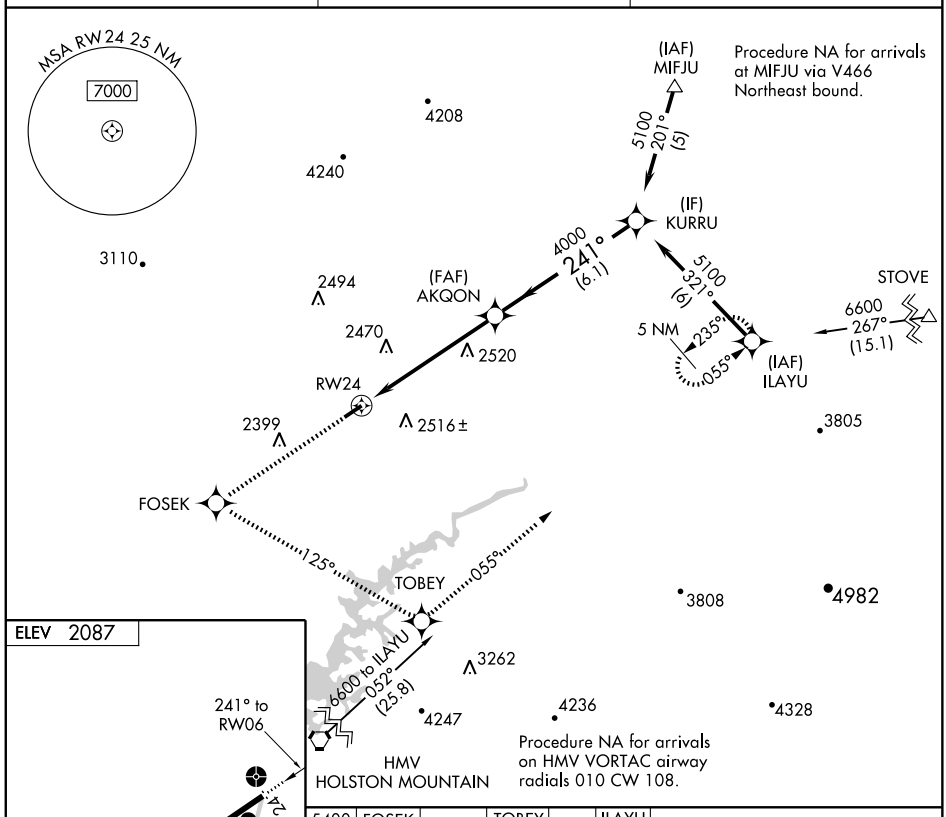
ABINGDON / VIRGINIA HIGHLANDS (VJI)

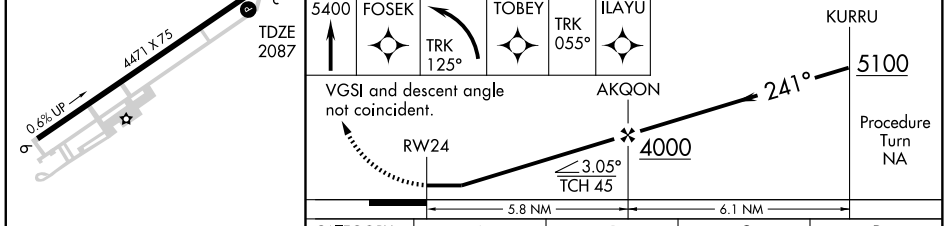
Inoperative table does not apply. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Tri-Cities Rgnl TN/VA altimeter setting and increase all MDA 140 feet; increase LNAV Cat. B and Circling Cat. A visibility ¼ mile, increase LNAV and Circling Cat. C/D visibility ½ mile.

ODALS

MISSED APPROACH: Climb to 5400 direct FOSEK and left turn via track 125° to TOBEY and via track 055° to ILAYU and hold.

AWOS-3	TRI-CITY APP CON	UNICOM
128.125	128.67 349.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2820-1 733 (800-1)		2820-2 733 (800-2)	2820-2¼ 733 (800-2¼)
CIRCLING	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)

MIRL Rwy 6-24 L

REIL Rwy 24 L

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC HMV	APP CRS	Rwy ldg	N/A
114.6	021°	TDZE	N/A
Chan 93		Apt Elev	2087

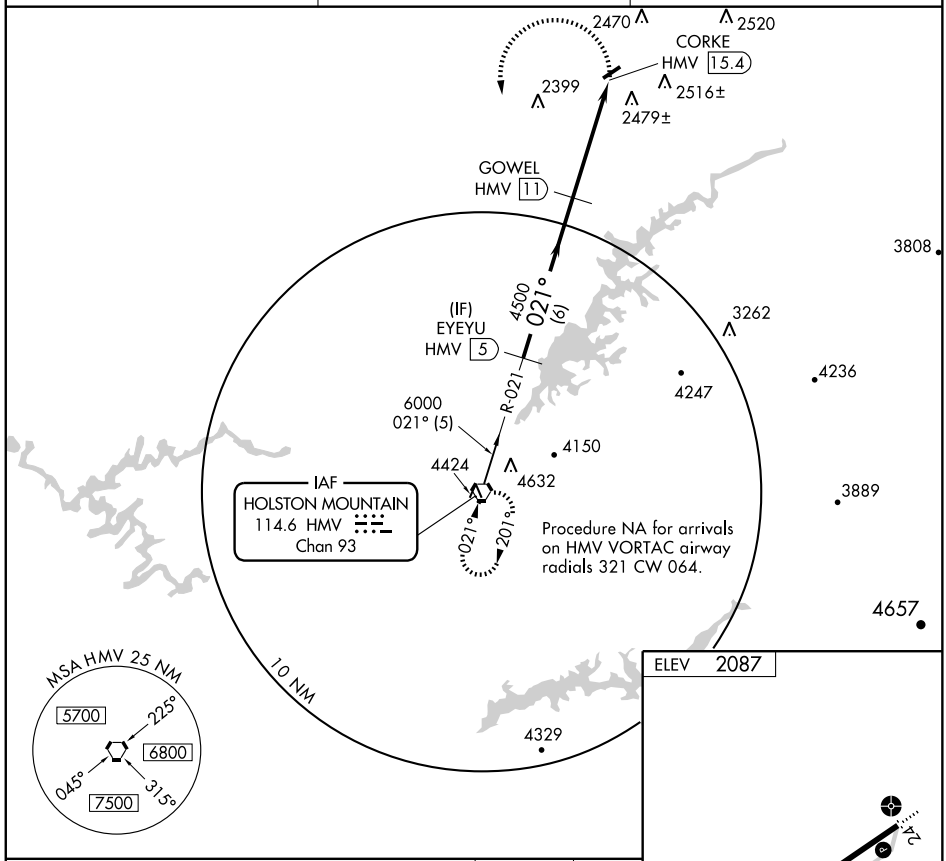
VOR/DME-B

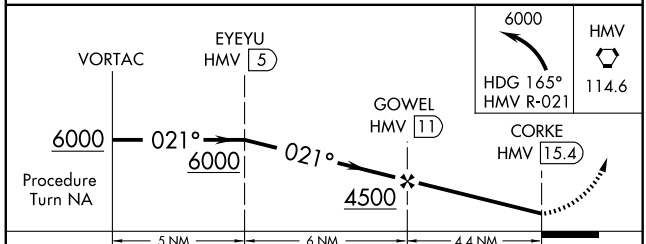
ABINGDON / VIRGINIA HIGHLANDS (VJI)

When local altimeter setting not received; use Tri-Cities Rgnl TN/VA altimeter setting and increase all MDA 140 feet; increase Cat. A visibility ¼ mile, Cats. C and D visibility ½ mile.

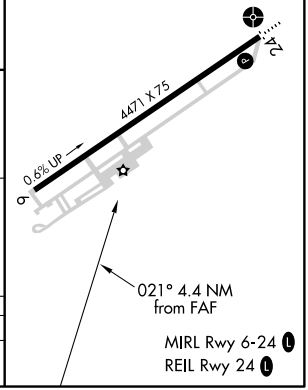
MISSED APPROACH: Climbing left turn to 6000 via heading 165° and HMV R-021 to HMV VORTAC and hold.

AWOS-3	TRI-CITY APP CON	UNICOM
128.125	128.67 349.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	2860-1 773 (800-1)	2860-1¼ 773 (800-1¼)	2860-2¼ 773 (800-2¼)	2860-2½ 773 (800-2½)



MIRL Rwy 6-24 L
REIL Rwy 24 L

LOC/DME I-BCB	APP CRS	Rwy ldg	4539
109.1	123°	TDZE	2113
Chan 28		Apt Elev	2132

LOC/DME RWY 12

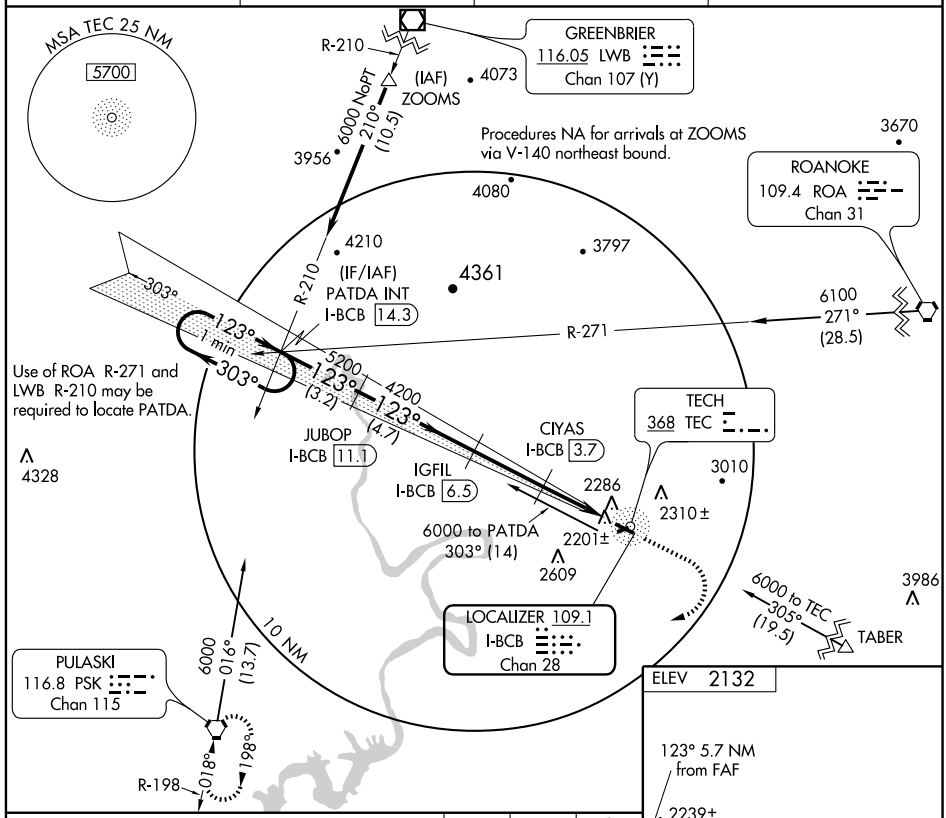
BLACKSBURG/ VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

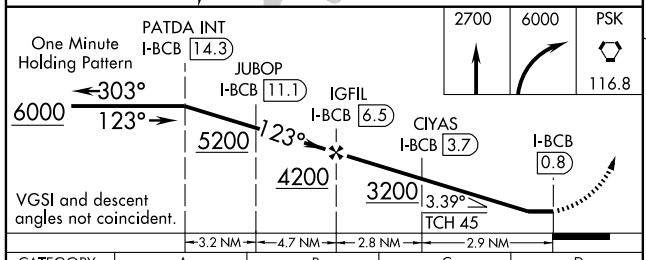
T NA — Inoperative table does not apply. When VGSI inop, procedure NA at night.

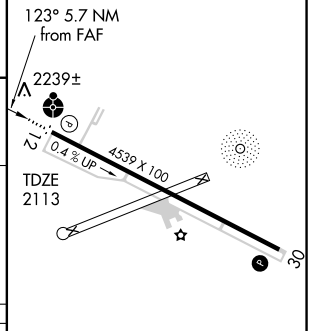
ODALS

MISSED APPROACH: Climb to 2700 then climbing right turn to 6000 direct PSK VORTAC and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
133.325	126.9 339.8	124.85	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-12	2460-1 347 (400-1)			NA
CIRCLING	2800-1 668 (700-1)		2800-1¾ 668 (700-1¾)	NA

REIL Rwy 30 L
MIRL Rwy 12-30 L

NE-3, 14 JAN 2010 to 11 FEB 2010

NDB TEC	APP CRS	Rwy ldg	N/A
368	069°	TDZE	N/A
		Apt Elev	2132

NDB-A

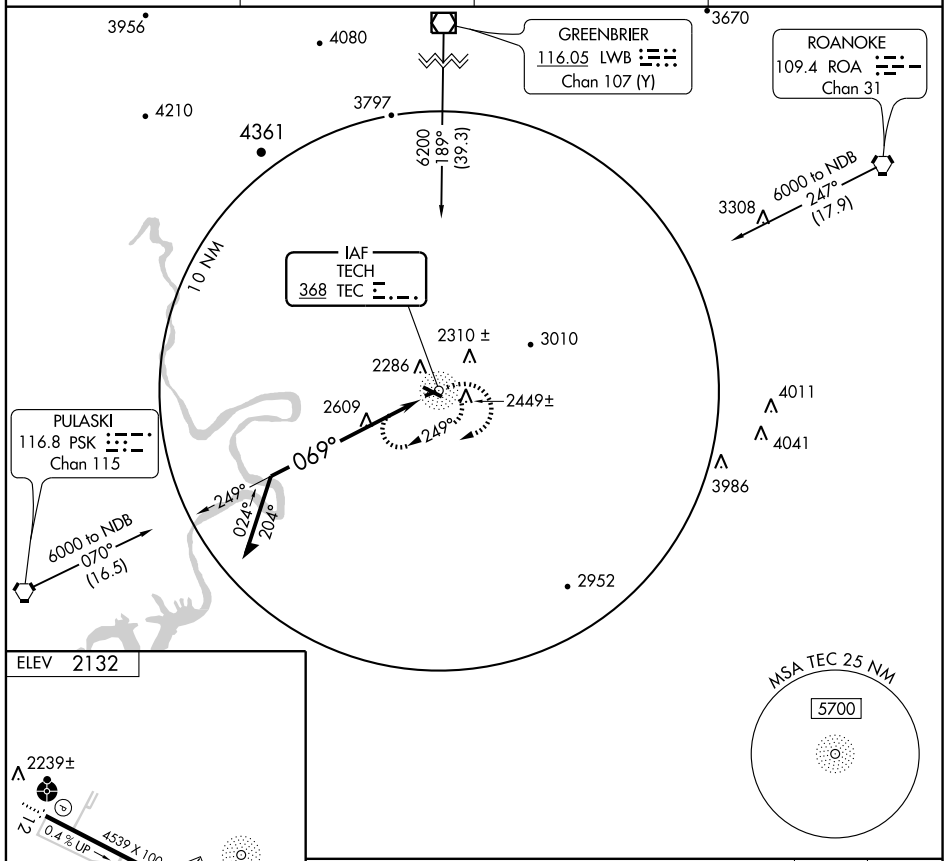
BLACKSBURG/VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

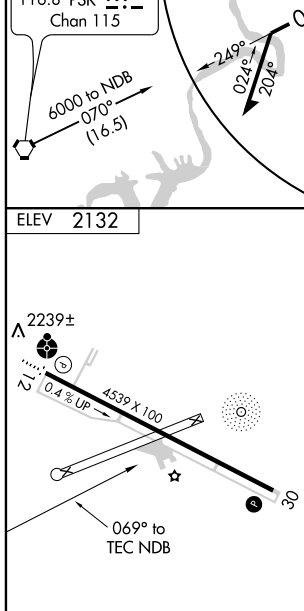
NA

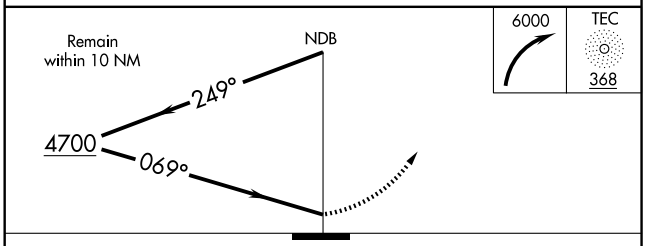
When local altimeter setting not received, use Dublin altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing right turn to 6000 in TEC NDB holding pattern.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
133.325	126.9 339.8	124.85	123.05 (CTAF) L







REIL Rwy 30 L
MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
CIRCLING	3200-1¼ 1068 (1100-1¼)	3200-1½ 1068 (1100-1½)	3200-3 1068 (1100-3)	NA

WAAS CH 86712 W12A	APP CRS 123°	Rwy ldg 4539 TDZE 2113 Apt Elev 2132

RNAV (GPS) RWY 12

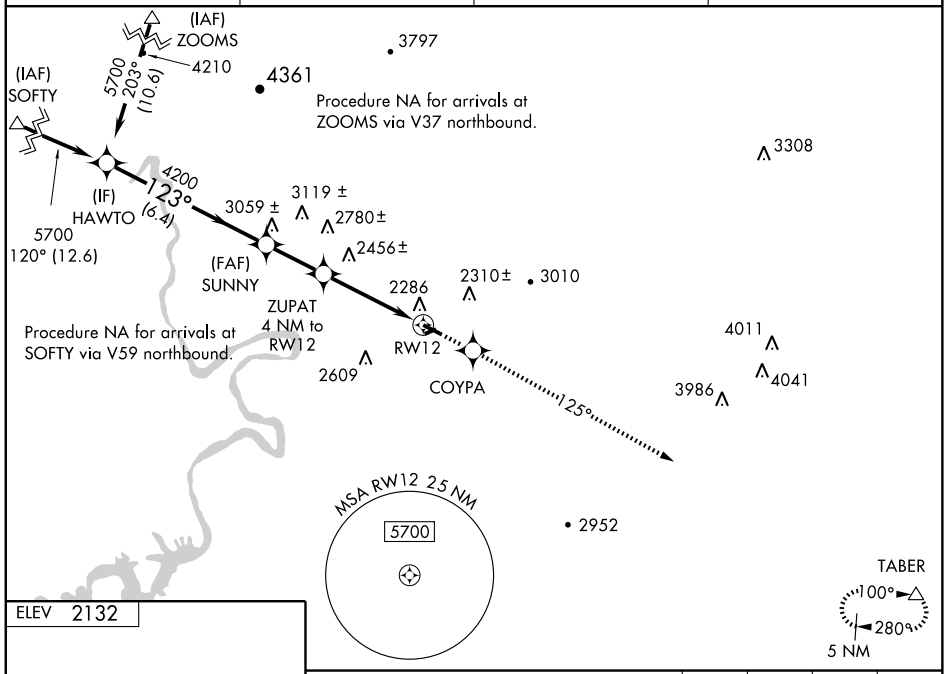
BLACKSBURG/ VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

Inoperative table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Dublin altimeter setting and increase all DA/MDA 40 feet. Increase LNAV and Circling Cat C visibility ¼ mile.

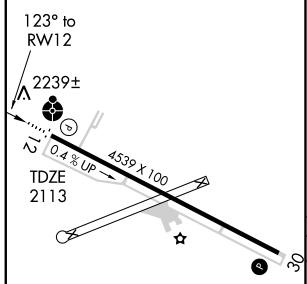
ODALS

MISSED APPROACH: Climb to 5500 direct COYPA and via 125° track to TABER and hold.

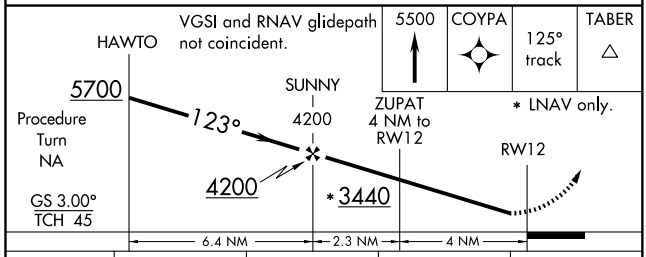
AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
133.325	126.9 339.8	124.85	123.05 (CTAF) L



ELEV 2132



REIL Rwy 30 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	2506-1½ 393 (400-1½)			NA
LNAV/VNAV DA	2586-1¾ 473 (500-1¾)			NA
LNAV MDA	2700-1 587 (600-1)		2700-1½ 587 (600-1½)	NA
CIRCLING	2800-1 668 (700-1)		2800-1¾ 668 (700-1¾)	NA

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4539
303°	TDZE	2132
	Apt Elev	2132

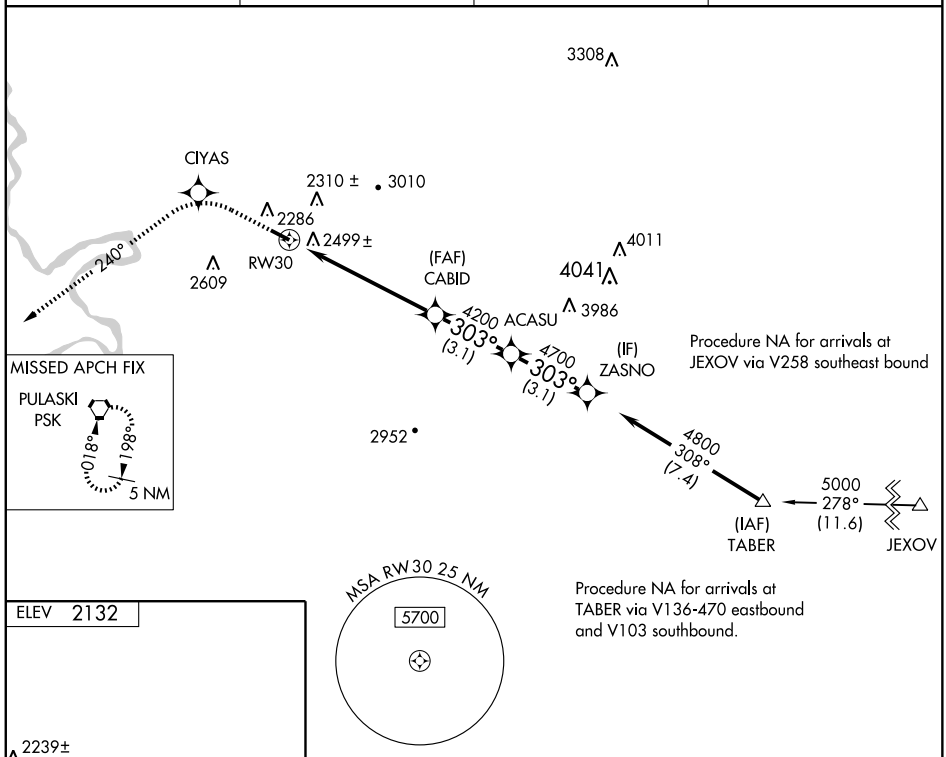
RNAV (GPS) RWY 30

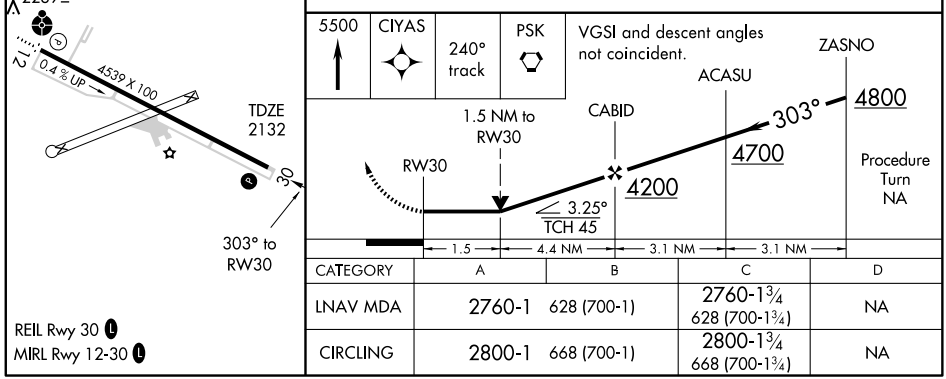
BLACKSBURG/ VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Dublin altimeter setting and increase all MDA 40 feet and Circling Cat C visibility ¼ mile.
VDP NA when using Dublin altimeter setting.

MISSED APPROACH: Climb to 5500 direct CIYAS and via 240° track to PSK VORTAC and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
133.325	126.9 339.8	124.85	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2760-1 628 (700-1)		2760-1¾ 628 (700-1¾)	NA
CIRCLING	2800-1 668 (700-1)		2800-1¾ 668 (700-1¾)	NA

REIL Rwy 30 L
MIRL Rwy 12-30 L

(SETHY2.SETHY) 09239

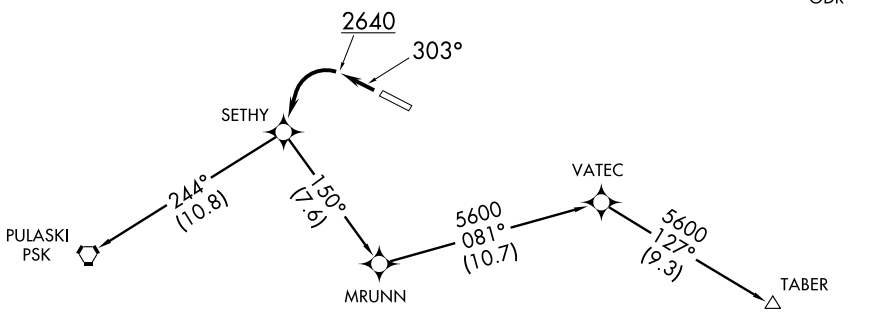
BLACKSBURG/ VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

BLACKSBURG, VIRGINIA

SETHY TWO DEPARTURE (RNAV)

AWOS-3 133.325
CTAF 123.05
ROANOKE DEP CON
126.9 339.8
ROANOKE CLNC DEL
124.85

NOTE: Aircraft on TABER transition, do not exceed 220 KIAS until passing SETHY.



NOTE: GPS Required.
NOTE: RNAV 1.
NOTE: RADAR Required.
NOTE: When in RADAR contact expect vectors to filed/assigned route.

TAKE-OFF OBSTACLES

Rwy 30:
Trees beginning 90′ from DER, 461′ left of centerline, up to 46′ AGL/2140′ MSL.
Fence and OL pole beginning 546′ from DER, 161′ left of centerline, up to 12′ AGL/2139′ MSL.
Vehicle on road beginning 567′ from DER, 310′ left of centerline, up to 24′ AGL/2137′ MSL.
Trees beginning 2080′ from DER, 788′ left of centerline, up to 100′ AGL/2201′ MSL.
Fence 861′ from DER, 52′ right of centerline, up to 12′ AGL/2135′ MSL.
Trees beginning 539′ from DER, 326′ right of centerline, up to 40′ AGL/2153′ MSL.
Trees beginning 1328′ from DER, 117′ right of centerline, up to 100′ AGL/2182′ MSL.
Terrain beginning 330′ from DER, 366′ right of centerline, up to 2138′ MSL.
Pole and antenna beginning 1149′ from DER, 391′ right of centerline, up to 40′ AGL/2151′ MSL.

TAKE-OFF MINIMUMS

Rwy 12: NA-ATC.
Rwy 30: Standard with minimum climb of 300′ per NM to 2640.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

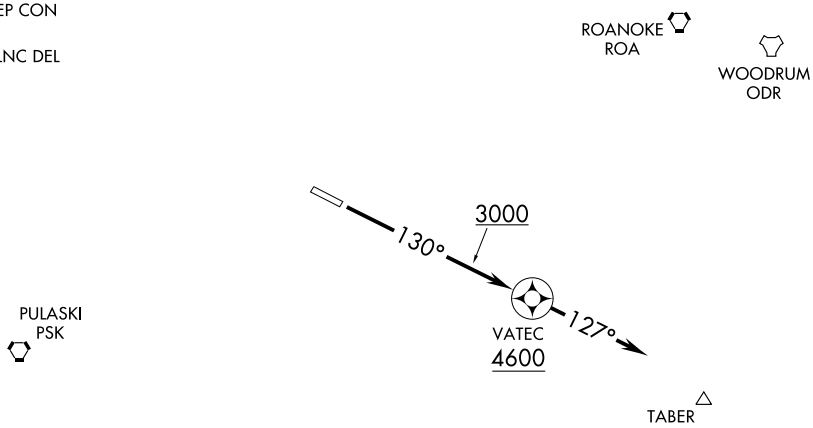
TAKE-OFF RUNWAY 30: Climb heading 303° to 2640, then left turn direct SETHY, Thence . . . .

. . . . Maintain 6000, expect clearance to filed altitude/flight level 10 minutes after departure.

PULASKI TRANSITION (SETHY2.PSK)
TABER TRANSITION (SETHY2.TABER)

VATEC ONE DEPARTURE (RNAV)

AWOS-3 133.325
CTAF 123.05
ROANOKE DEP CON
126.9 339.8
ROANOKE CLNC DEL
124.85



NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: When in RADAR contact expect vectors to filed/assigned route.

TAKE-OFF OBSTACLES

Rwy 12: Bushes and trees beginning 275′ from DER, 154′ left of centerline, up to 100′ AGL/2239′ MSL. Trees beginning 5108′ from DER, 1363′ left of centerline, up to 100′ AGL/2499′ MSL. Trees beginning 3165′ from DER, 1324′ right of centerline, up to 100′ AGL/2279′ MSL.

TAKE-OFF MINIMUMS

Rwy 30: NA-ATC.
Rwy 12: 400-1¼ with minimum climb of 250′ per NM to 4600 or standard with minimum climb of 563′ per NM to 3000.

NOTE: Chart not to scale.

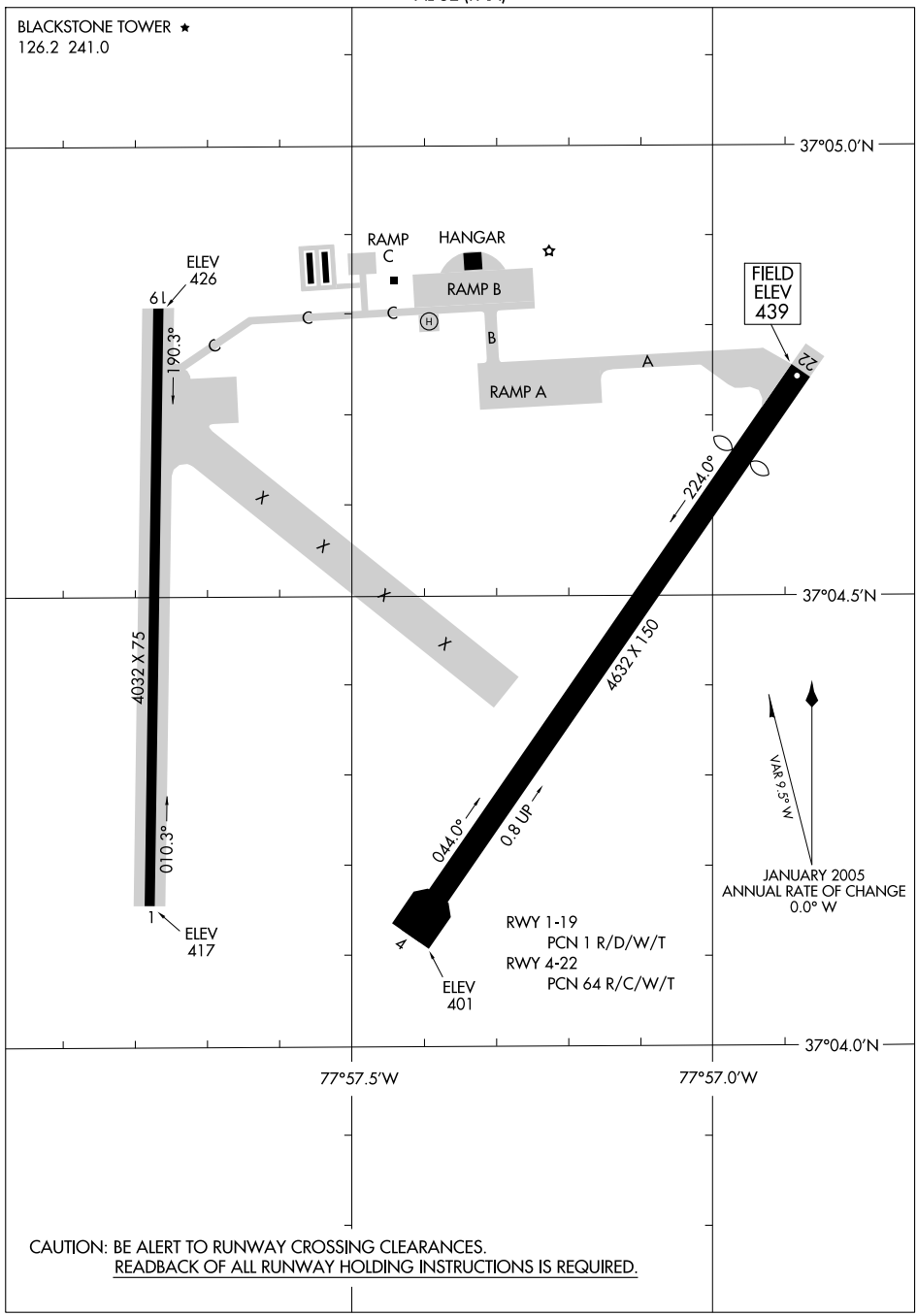
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 12: Climb heading 130° to 3000, then direct VATEC, then fly heading 127° for radar vectors, Thence . . . .

. . . . Maintain 6000, expect clearance to filed altitude/flight level 10 minutes after departure.

AIRPORT DIAGRAM

BLACKSTONE/ALLEN C. PERKINSON/BAAF (BKT)
AL-52 (FAA)
BLACKSTONE, VIRGINIA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NE-3, 14 JAN 2010 to 11 FEB 2010

NDB-B

NDB BKT	APCH CRS	Rwy ldg / TDZE / Arpt Elev
326	135°	NA / NA / 439

AL-52 [USA]

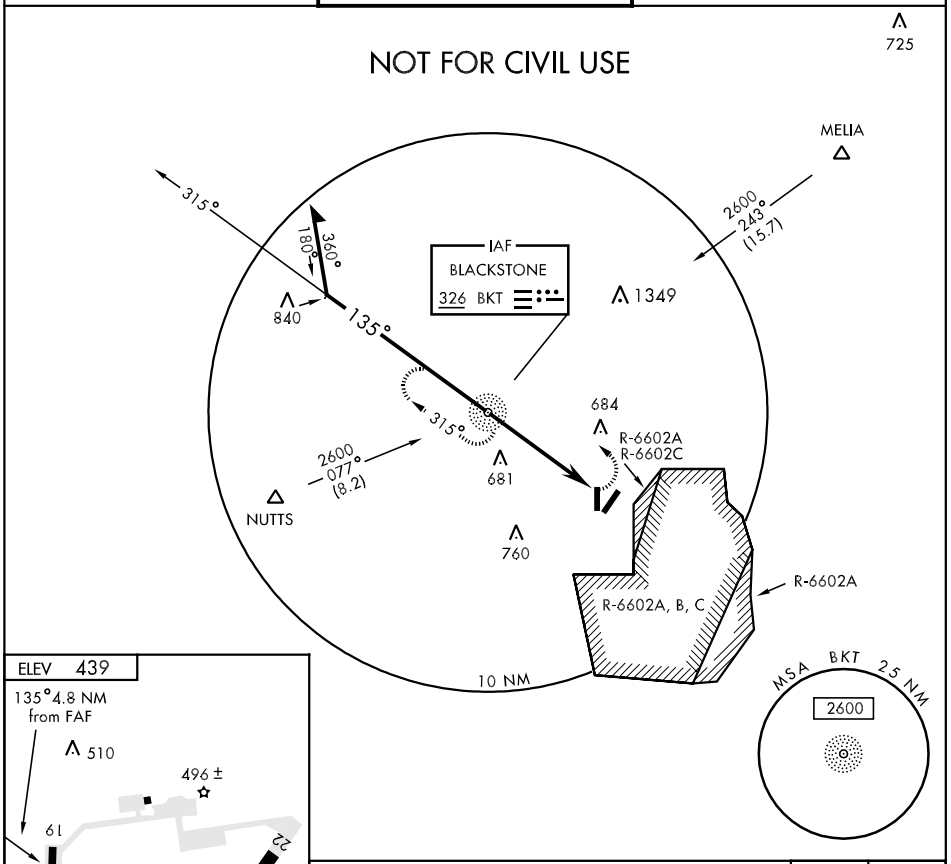
BLACKSTONE/
ALLEN C. PERKINSON BAAF (BKT)

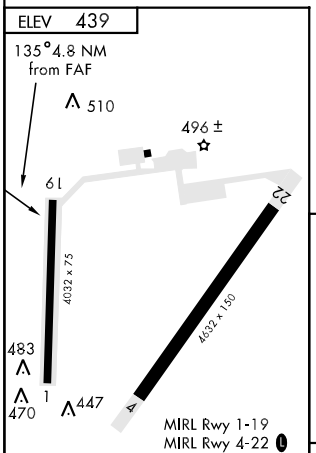
* Circling not authorized East of Rwy 4-22.

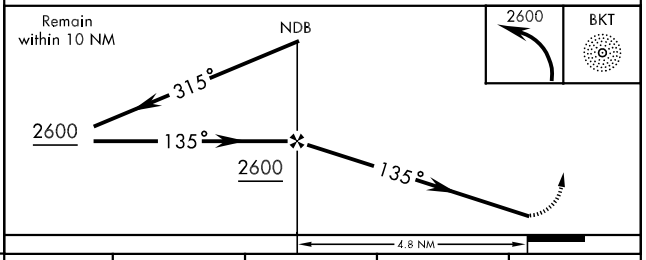
Use Mecklenburg-Brunswick Regional altimeter setting.

MISSED APPROACH: Climbing left turn to 2600 direct BKT NDB and hold.

WASHINGTON CENTER	BLACKSTONE TOWER	UNICOM
118.75 353.9	126.2 241.0	122.95 (CTAF)







FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
CIRCLING *	1040-1 601 (700-1)		1040-1¾ 601 (700-1¾)	1040-2 601 (700-2)

NDB BKT	APP CRS	Rwy ldg	N/A
326	135°	TDZE	N/A
		Apt Elev	439

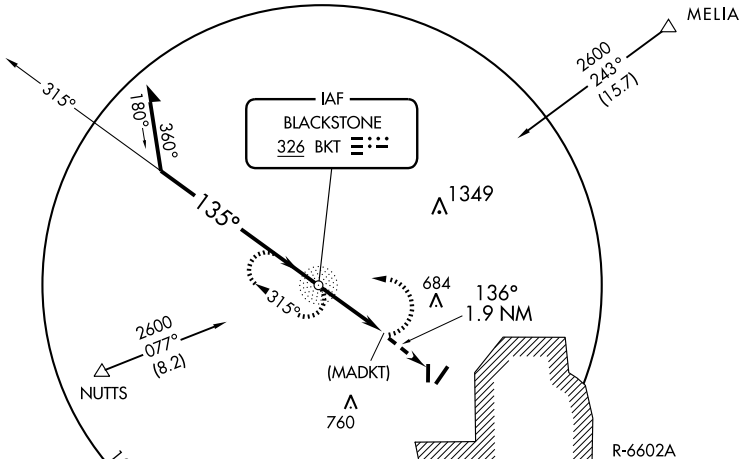
NDB or GPS-A

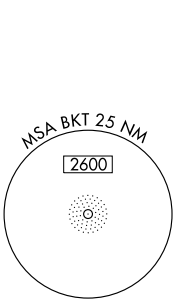
BLACKSTONE/ALLEN C. PERKINSON BLACKSTONE AAF (BKT)

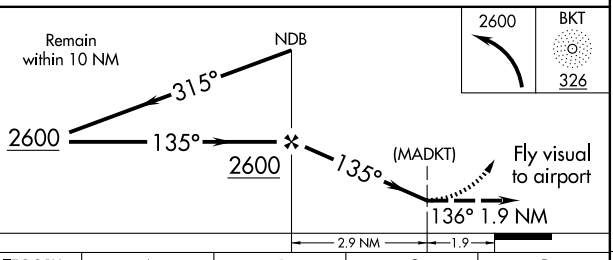
Use Mecklenburg-Brunswick Rgnl altimeter setting.
Circling not authorized east of Rwy 4-22.
NA Fly visual to airport, 136° - 1.9 NM.

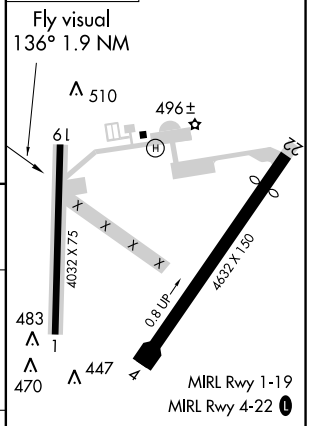
MISSED APPROACH: Climbing left turn to 2600 direct BKT NDB and hold.

WASHINGTON CENTER	BLACKSTONE TOWER *	CTAF (L)
118.75 353.9	126.2 241.0	122.95









CATEGORY	A	B	C	D
CIRCLING	1100-2¼ 661 (700-2¼)			NA

FAF to MAP 2.9 NM

Knots	60	90	120	150	180
Min:Sec	2:54	1:56	1:27	1:10	0:58

APP CRS	Rwy ldg	4632
058°	TDZE	429
	Apt Elev	439

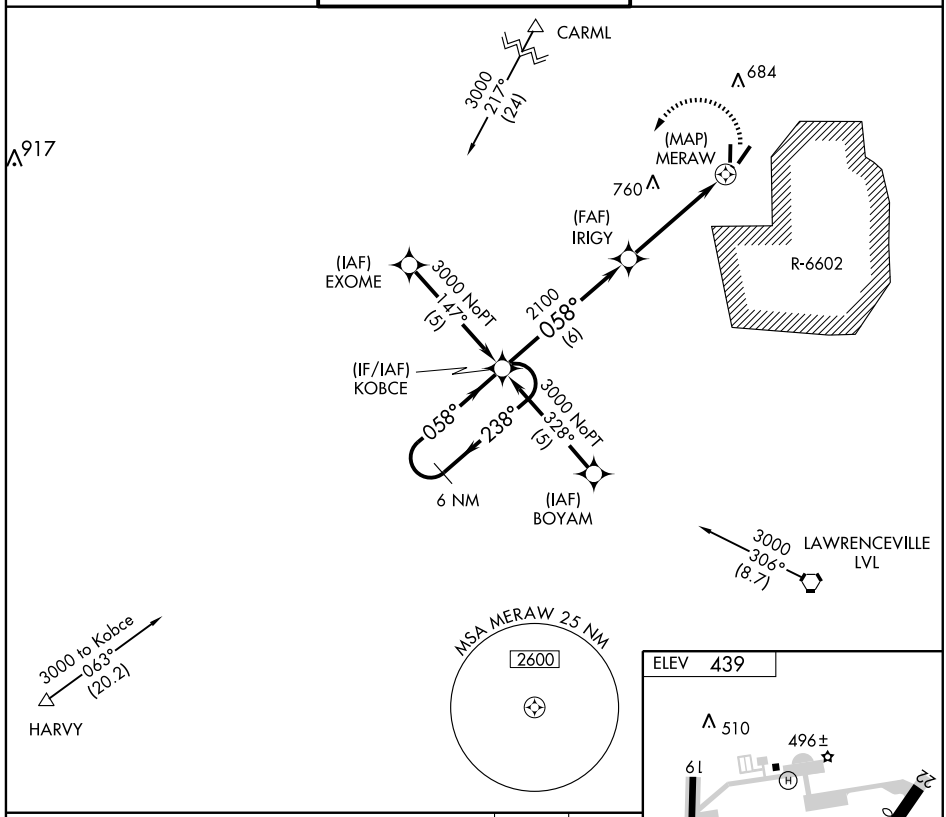
RNAV (GPS) RWY 4

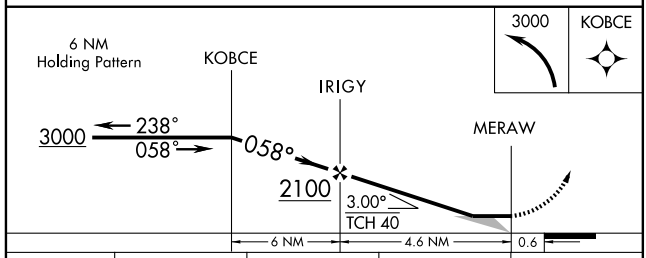
BLACKSTONE/ALLEN C. PERKINSON BLACKSTONE AAF (BKT)

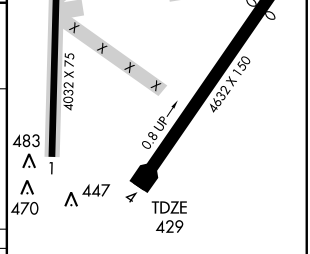
Use Mecklenburg-Brunswick Rgnl altimeter setting.
Circling NA East of Rwy 4-22. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3000 direct KOBCE and hold.

WASHINGTON CENTER	BLACKSTONE TOWER *	CTAF
118.75 353.9	126.2 241.0	122.95







CATEGORY	A	B	C	D
LNAV MDA	940-1 511 (600-1)		940-1½ 511 (600-1½)	NA
CIRCLING	940-1 501 (600-1)		940-1½ 501 (600-1½)	NA

MIRL Rwy 1-19
MIRL Rwy 4-22

APP CRS	Rwy ldg	3932
220°	TDZE	438
	Apt Elev	439

RNAV (GPS) RWY 22

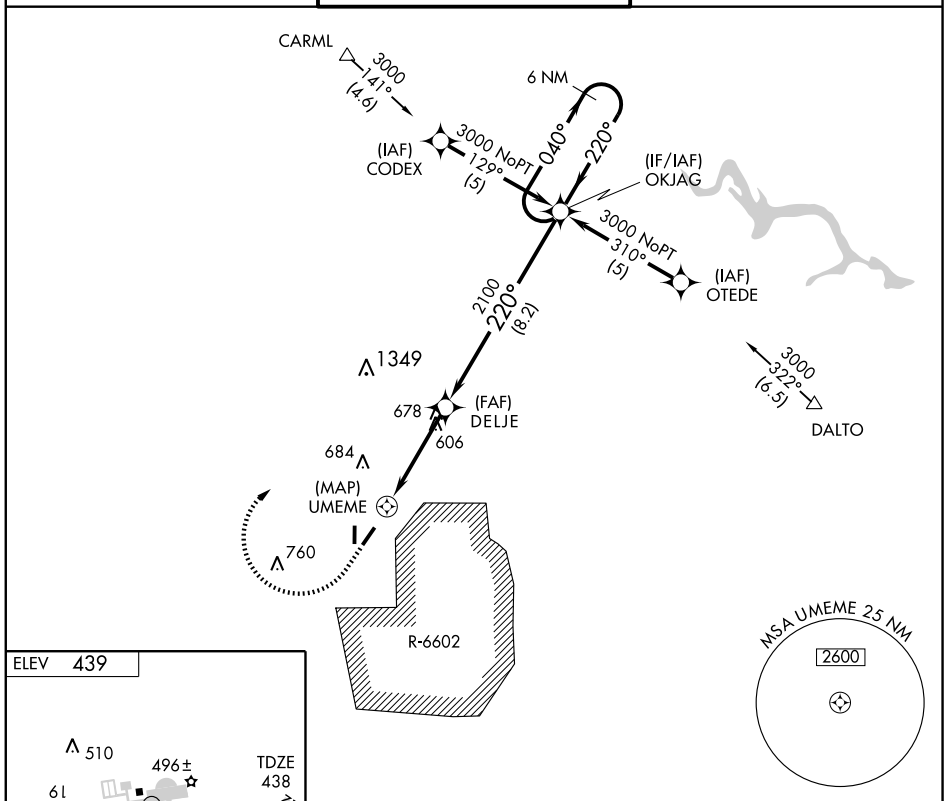
BLACKSTONE/ALLEN C. PERKINSON BLACKSTONE AAF (BKT)

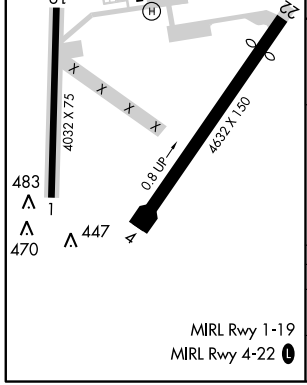
Use Mecklenburg-Brunswick Rgnl altimeter setting.
Circling NA East of Rwy 4-22. DME/DME RNP-0.3 NA.

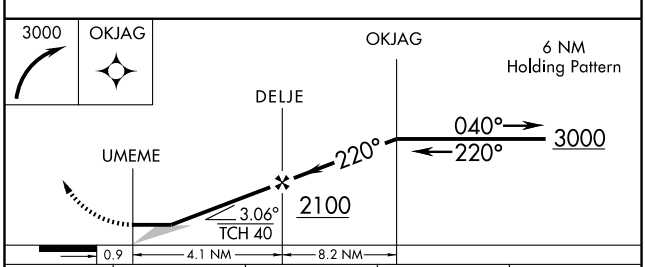
NA

MISSED APPROACH: Climbing right turn to 3000 direct OKJAG and hold.

WASHINGTON CENTER	BLACKSTONE TOWER *	CTAF
118.75 353.9	126.2 241.0	122.95







CATEGORY	A	B	C	D
LNAV MDA	980-1 542 (600-1)		980-1½ 542 (600-1½)	NA
CIRCLING	980-1 541 (600-1)		980-1½ 541 (600-1½)	NA

NDB VBW 241	APP CRS 035°	Rwy ldg N/A TDZE N/A Apt Elev 1165

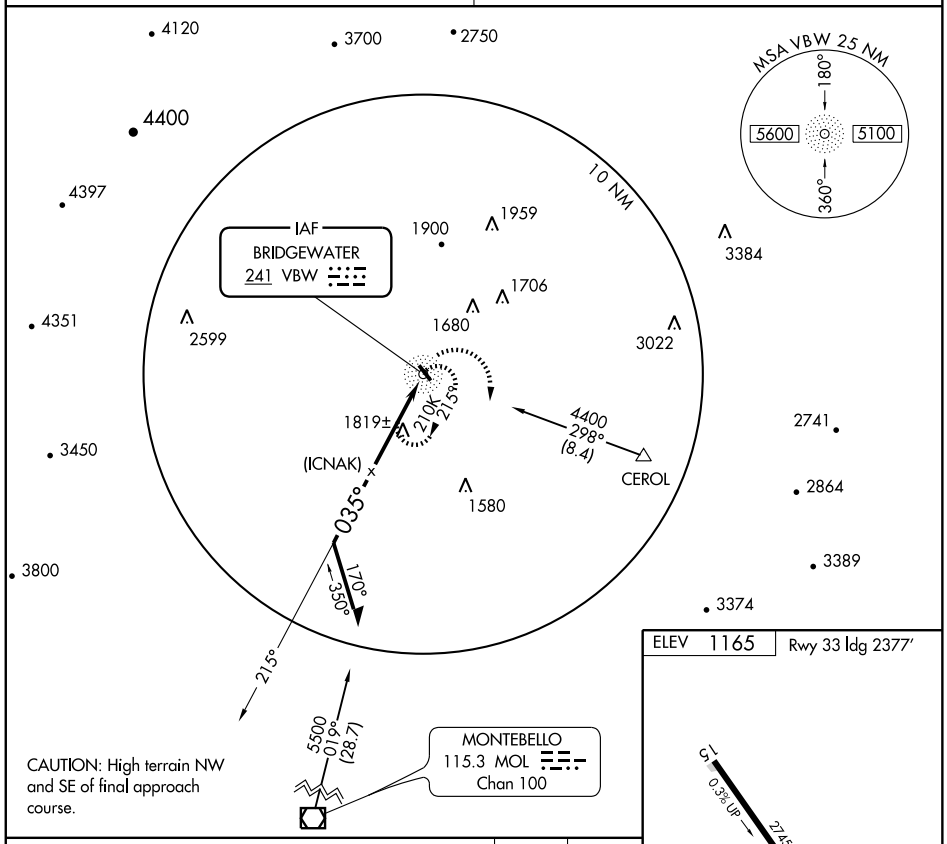
NDB or GPS-A
BRIDGEWATER AIR PARK (VBW)

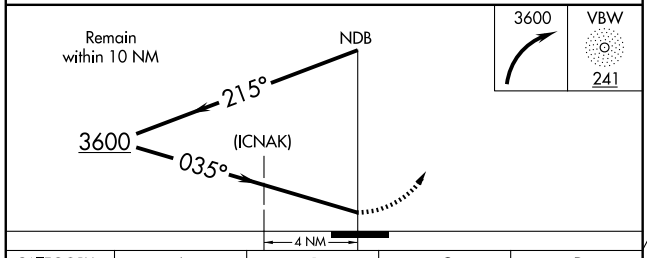
NA

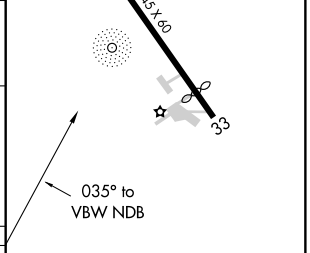
Use Shenandoah Valley altimeter setting; when not available use Charlottesville, VA altimeter setting and increase all MDAs to 2680 and visibilities to 3 miles all Cats. If neither Shenandoah nor Charlottesville altimeter available procedure not authorized.

MISSED APPROACH: Climbing right turn to 3600 in VBW NDB holding pattern.

POTOMAC APP CON	UNICOM
132.85 257.75	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	2300-1¼ 1135 (1200-1¼)	2300-1½ 1135 (1200-1½)	NA	

MIRL Rwy 15-33 L

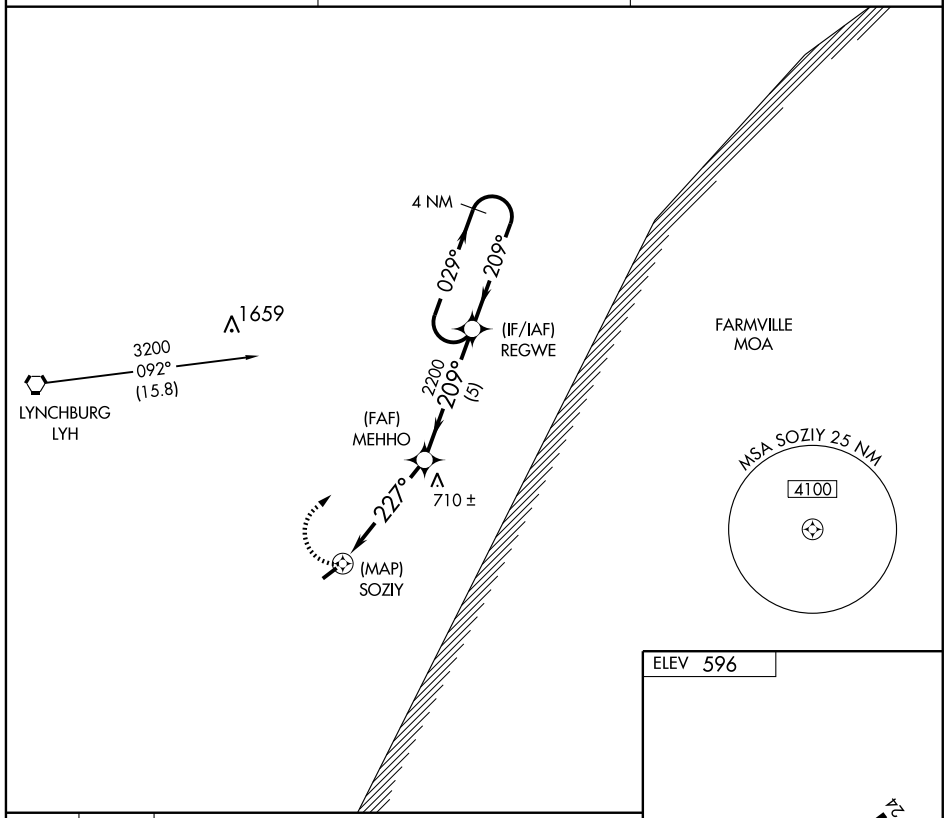
APP CRS	Rwy ldg	3798
227°	TDZE	596
	Apt Elev	596

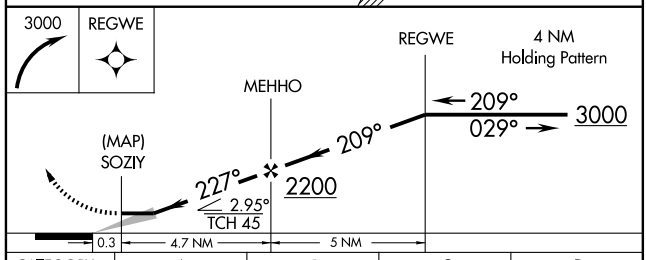
RNAV (GPS) RWY 24
BROOKNEAL/CAMPBELL COUNTY (ØV4)

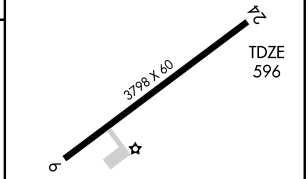
Use Lynchburg Rgnl/Preston Glenn Field altimeter setting.
NA GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 3000 direct REGWE WP and hold.

LYNCHBURG ASOS	ROANOKE APP CON	UNICOM
119.8	135.0 254.32	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	980-1 384 (400-1)			NA
CIRCLING	1160-1 564 (600-1)		1160-1½ 564 (600-1½)	NA

MIRL Rwy 6-24 L

VORTAC LYH 109.2 Chan 29	APP CRS 128°	Rwy ldg N/A TDZE N/A Apt Elev 596

VOR/DME-A

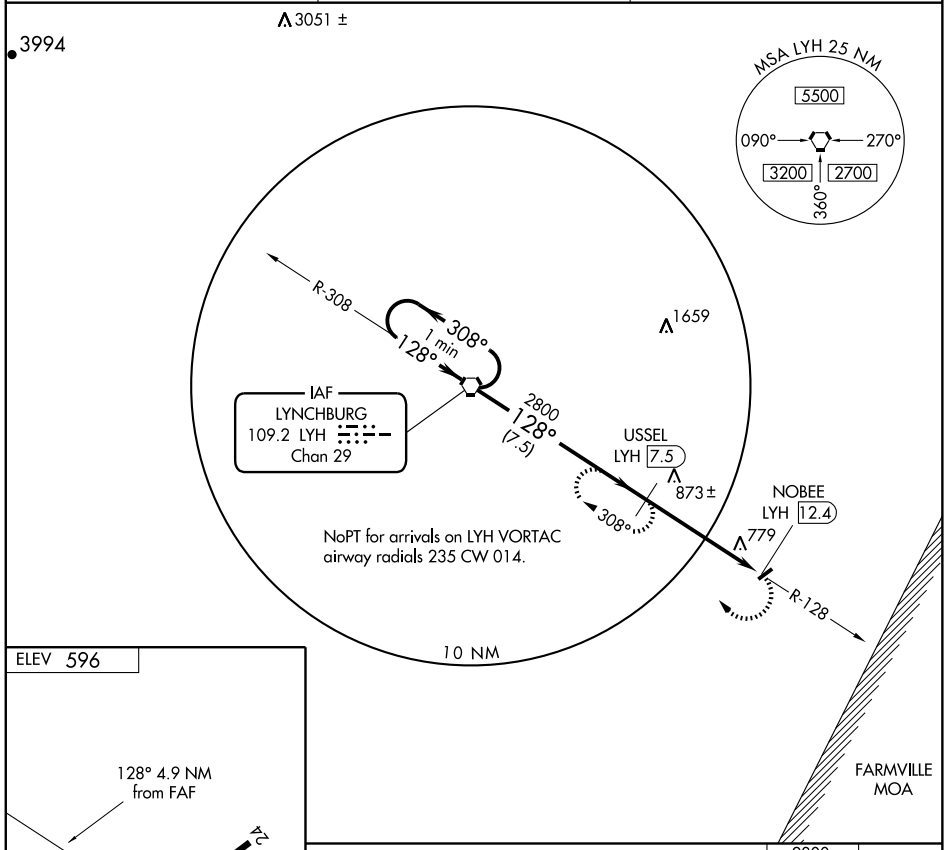
BROOKNEAL/CAMPBELL COUNTY (ØV4)

Use Lynchburg Rgnl/Preston Glenn Field altimeter setting.

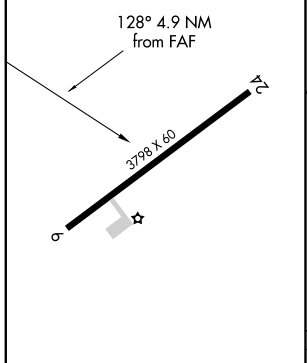
NA

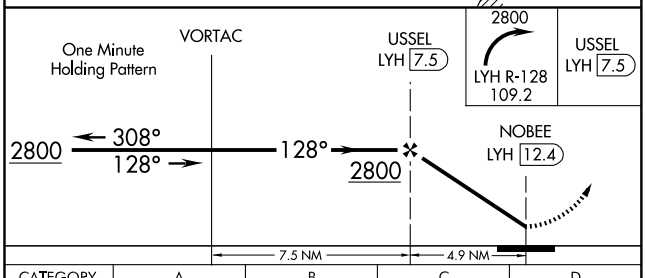
MISSED APPROACH: Climbing right turn to 2800 via LYH VORTAC R-128 to USSEL 7.5 DME and hold.

LYNCHBURG ASOS	ROANOKE APP CON	UNICOM
119.8	135.0 254.32	122.7 (CTAF) L



ELEV 596





CATEGORY	A	B	C	D
CIRCLING	1160-1 564 (600-1)		1160-1½ 564 (600-1½)	NA

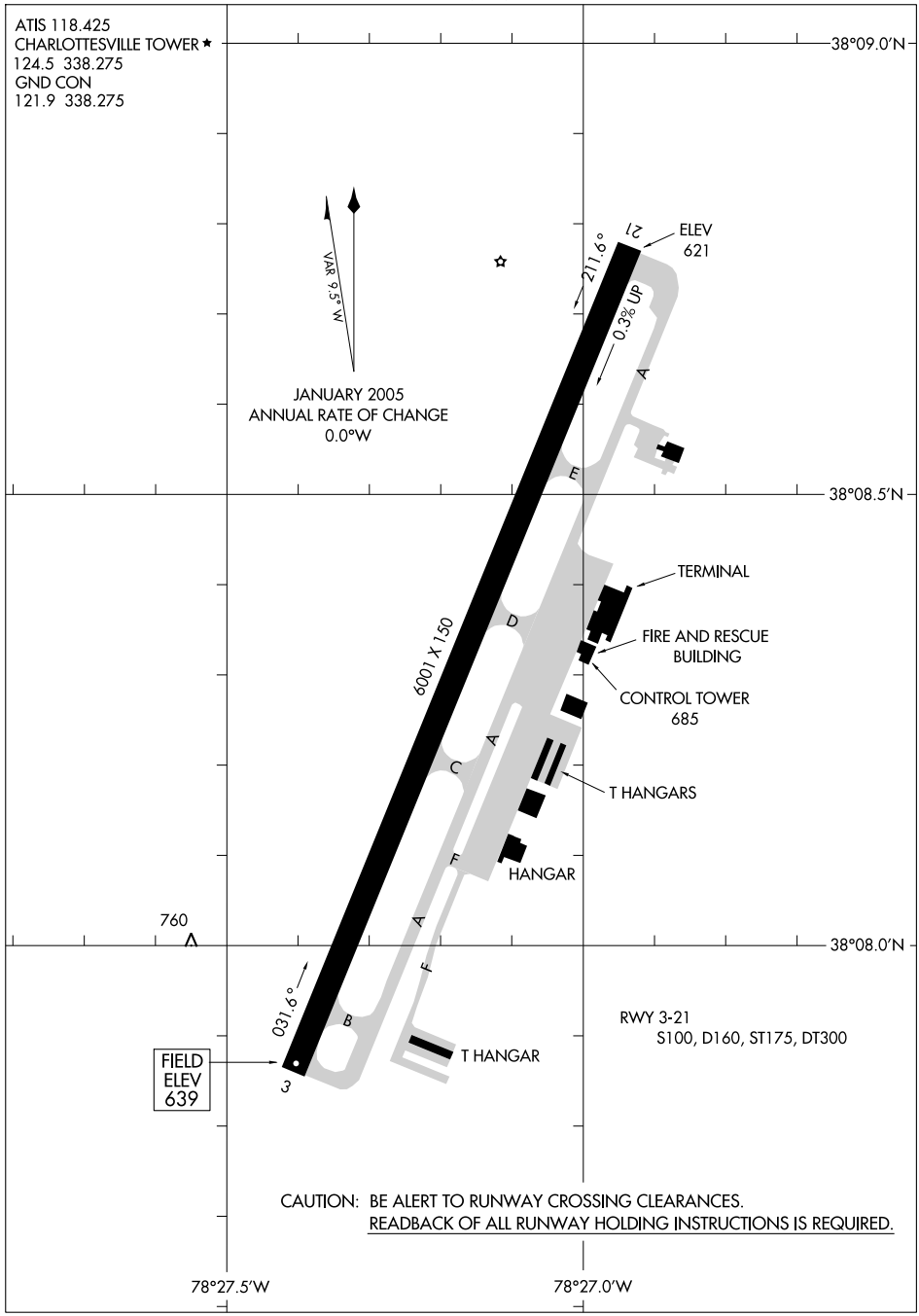
MIRL Rwy 6-24 L

06327

AIRPORT DIAGRAM

AL-765 (FAA)

CHARLOTTESVILLE-ALBERMARLE (CHO)
CHARLOTTESVILLE, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

CHARLOTTESVILLE, VIRGINIA

AL-765 (FAA)

LOC I-CHO	APP CRS	Rwy ldg	6001
111.7	030°	TDZE	639
		Apt Elev	639

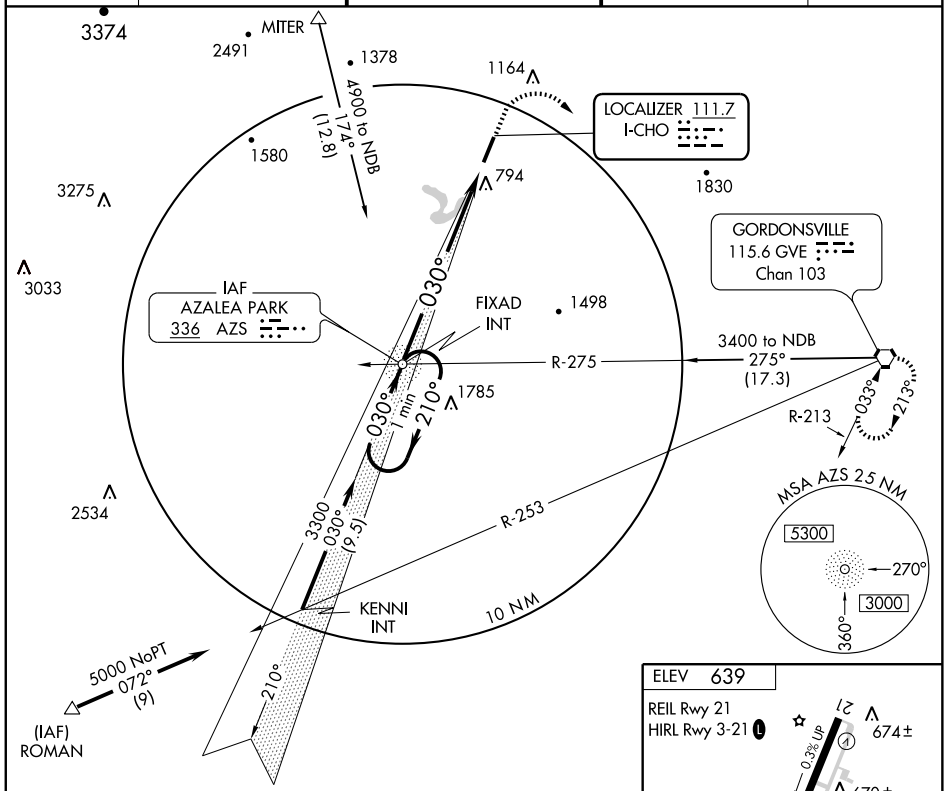
ILS or LOC RWY 3

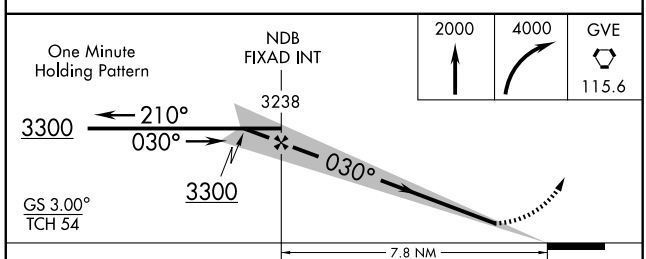
CHARLOTTESVILLE-ALBEMARLE (CHO)

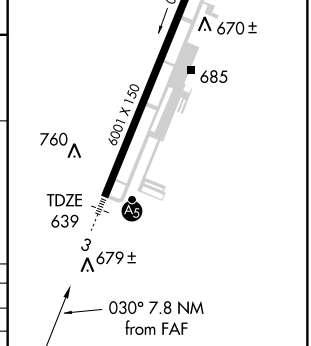
MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 4000 direct GVE VORTAC and hold.

ATIS	POTOMAC APP CON	CHARLOTTESVILLE TOWER ★	GND CON	UNICOM
118.425	132.85 257.75	124.5 (CTAF) L 338.275	121.9 338.275	122.95







CATEGORY	A	B	C	D
S-ILS 3	856-½ 217 (300-½)			
S-LOC 3	1380-½ 741 (800-½)	1380-¾ 741 (800-¾)	1380-1¾ 741 (800-1¾)	1380-2 741 (800-2)
CIRCLING	1380-1 741 (800-1)	1380-1¼ 741 (800-1¼)	1380-2¼ 741 (800-2¼)	1560-3 921 (1000-3)

FAF to MAP 7.8 NM					
Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 61105 W03A	APP CRS 030°	Rwy ldg 6001 TDZE 639 Apt Elev 639

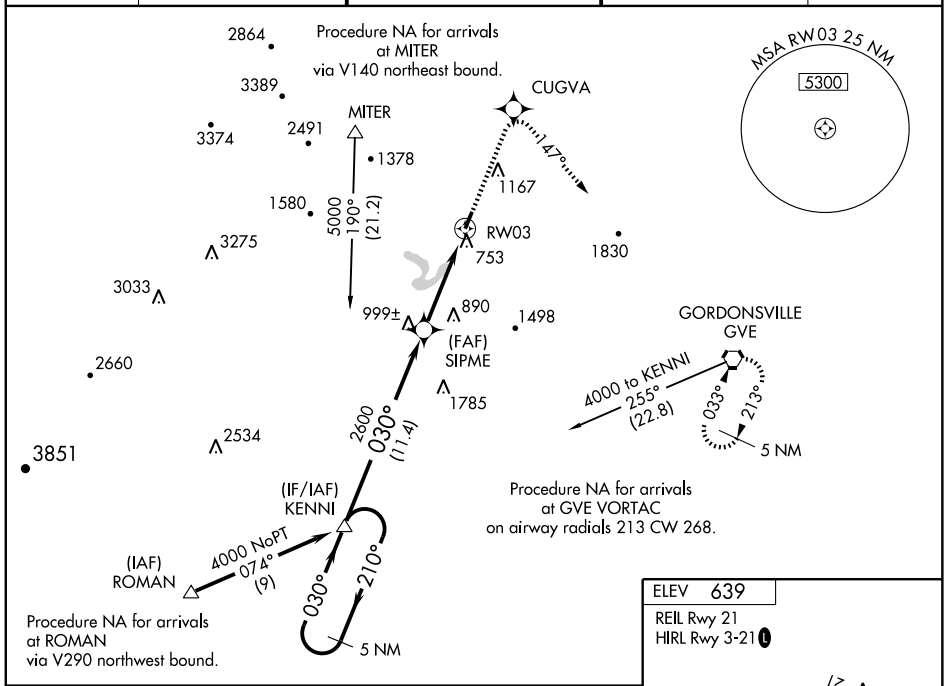
RNAV (GPS) RWY 3
CHARLOTTESVILLE-ALBEMARLE (CHO)

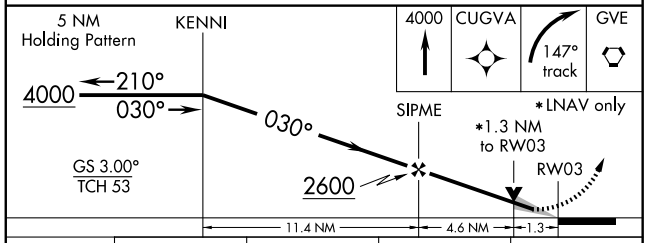
If local altimeter setting not received, use Staunton-Waynesboro-Harrisonburg altimeter setting and increase all DAs/MDAs 140 feet.
VDP NA when using Staunton-Waynesboro-Harrisonburg altimeter setting. Baro-VNAV NA when using Staunton-Waynesboro-Harrisonburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). For inoperative MALSR, increase LPV visibility to 1 mile all Cats. DME/DME RNP-0.3 NA.

MALSR

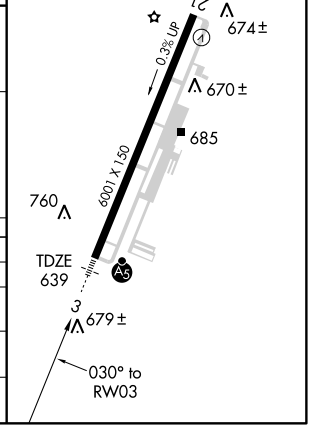
MISSED APPROACH: Climb to 4000 direct CUGVA and right turn via 147° track to GVE VORTAC and hold.

ATIS	POTOMAC APP CON	CHARLOTTESVILLE TOWER ★	GND CON	UNICOM
118.425	132.85 257.75	124.5 (CTAF) L 338.275	121.9 338.275	122.95





CATEGORY	A	B	C	D
LPV DA	903-½ 264 (300-½)			
LNAV/VNAV DA	1100-1 461 (500-1)			
LNAV MDA	1120-½ 481 (500-½)		1120-¾ 481 (500-¾)	1120-1 481 (500-1)
CIRCLING	1160-1 521 (600-1)		1160-1½ 521 (600-1½)	1560-3 921 (1000-3)



APP CRS	Rwy ldg	6001
196°	TDZE	628
	Apt Elev	639

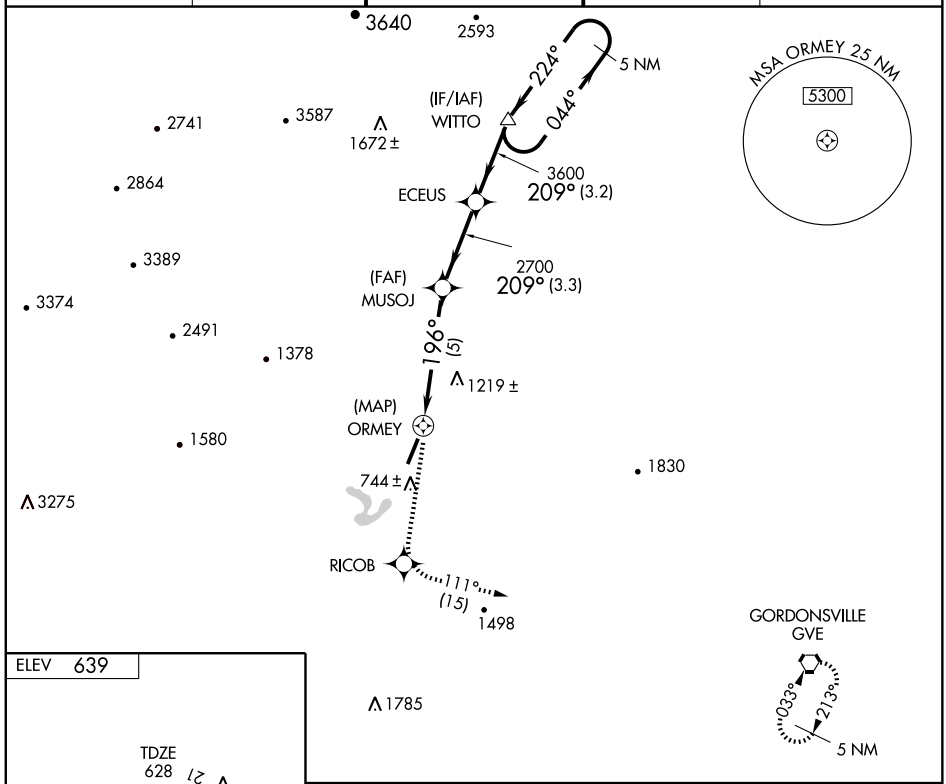
RNAV (GPS) Y RWY 21

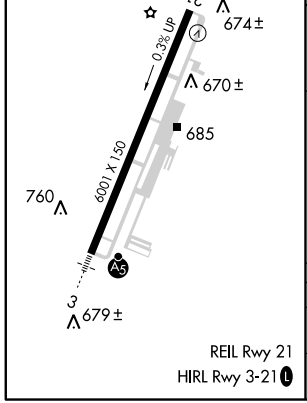
CHARLOTTESVILLE-ALBEMARLE (CHO)

DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all MDAs 140 feet.

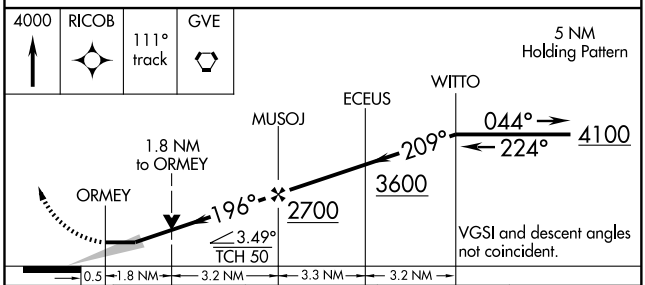
MISSED APPROACH: Climb to 4000 direct RICOB and via 111° track to GVE VORTAC and hold.

ATIS	POTOMAC APP CON	CHARLOTTESVILLE TOWER★	GND CON	UNICOM
118.425	132.85 257.75	124.5 (CTAF) L 338.275	121.9 338.275	122.95





REIL Rwy 21
HIRL Rwy 3-21 L



CATEGORY	A	B	C	D
LNAV MDA	1380-1 752 (800-1)	1380-1¼ 752 (800-1¼)	1380-2¼ 752 (800-2¼)	1380-2½ 752 (800-2½)
CIRCLING	1380-1 741 (800-1)	1380-1¼ 741 (800-1¼)	1380-2¼ 741 (800-2¼)	1560-3 921 (1000-3)

NE-3. 14 JAN 2010 to 11 FEB 2010

CHARLOTTESVILLE, VIRGINIA

AL-765 (FAA)

WAAS CH 45602 W21A	APP CRS 210°	Rwy ldg 6001 TDZE 628 Apt Elev 639

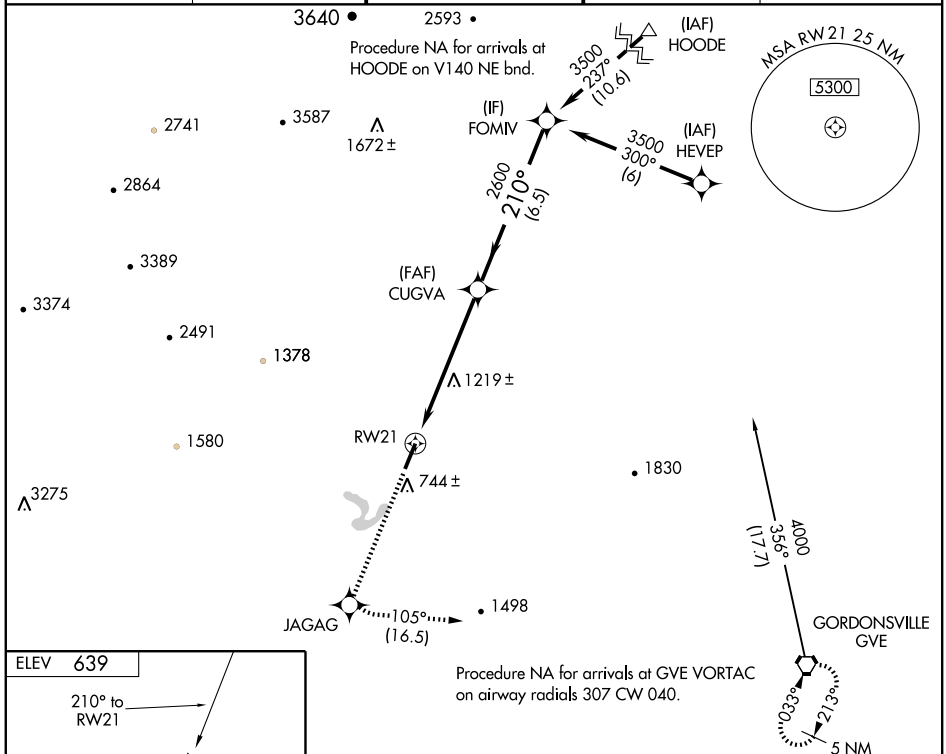
RNAV (GPS) Z RWY 21

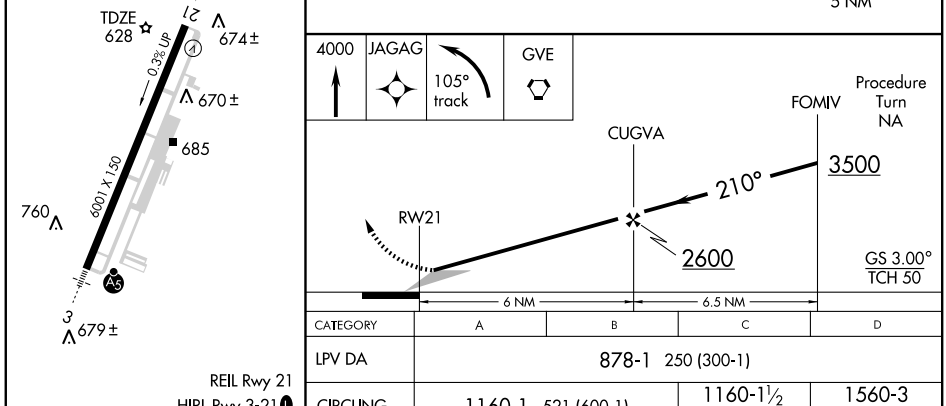
CHARLOTTESVILLE-ALBEMARLE (CHO)

Circling requires descent on RNAV glidepath to MDA. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Staunton/Waynesboro/Harrisonburg altimeter setting and increase all DA's/MDAs 140 feet.

MISSED APPROACH: Climb to 4000 direct JAGAG and left turn via 105° track to GVE VORTAC and hold.

ATIS	POTOMAC APP CON	CHARLOTTESVILLE TOWER★	GND CON	UNICOM
118.425	132.85 257.75	124.5 (CTAF) L 338.275	121.9 338.275	122.95





CATEGORY	A	B	C	D
LPV DA	878-1 250 (300-1)			
CIRCLING	1160-1 521 (600-1)		1160-1½ 521 (500-1½)	1560-3 921 (1000-3)

NE-3. 14 JAN 2010 to 11 FEB 2010

CHASE CITY, VIRGINIA

AL-6263 (FAA)

APP CRS	Rwy ldg	3400
184°	TDZE	503
	Apt Elev	503

RNAV (GPS) RWY 18

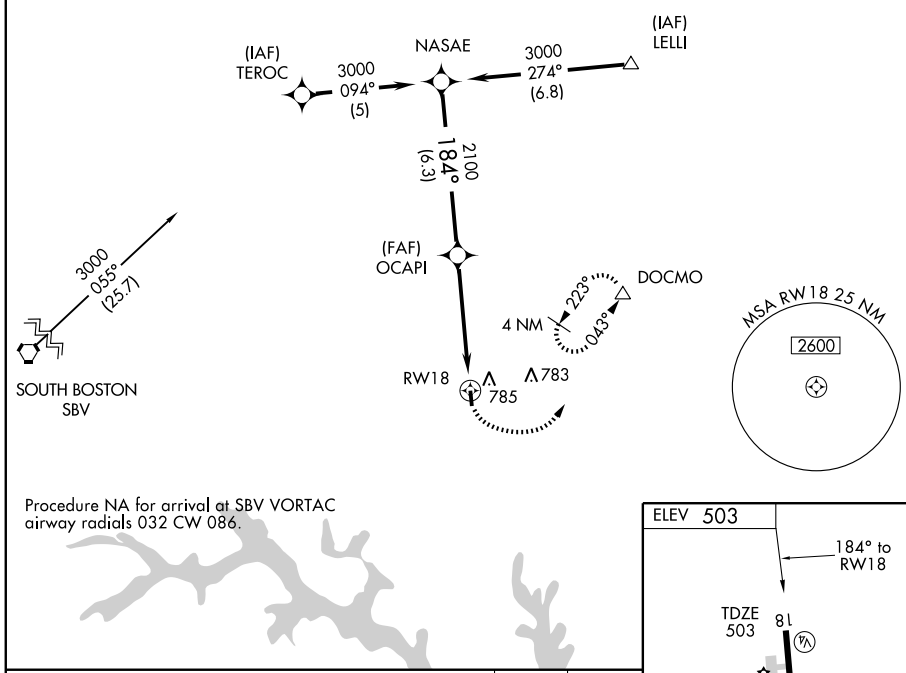
CHASE CITY MUNI (CXE)

DME/DME RNP-0.3 NA.
Straight-in minimums NA at night. Circling to Rwy 18 NA at night.
NA Use Mecklenburg-Brunswick altimeter setting; If not received, use Danville altimeter setting and increase all MDA's 60 feet.

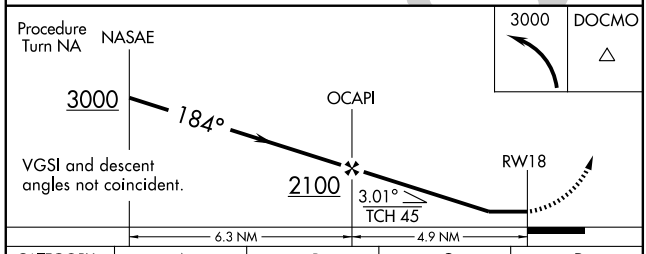
MISSED APPROACH: Climbing left turn to 3000 direct DOCMO and hold.

WASHINGTON CENTER	UNICOM
118.75 353.9	122.9 (CTAF)

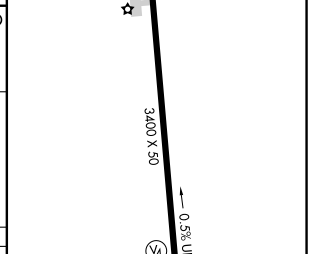
Procedure NA for arrival at LELLI via V20 Northeast bound.



Procedure NA for arrival at SBV VORTAC airway radials 032 CW 086.



CATEGORY	A	B	C	D
LNAV MDA	1100-1 597 (600-1)		1100-1½ 597 (600-1½)	NA
CIRCLING	1200-1 697 (700-1)		1200-2 697 (700-2)	NA



LIRL Rwy 18-36

NE-3. 14 JAN 2010 to 11 FEB 2010

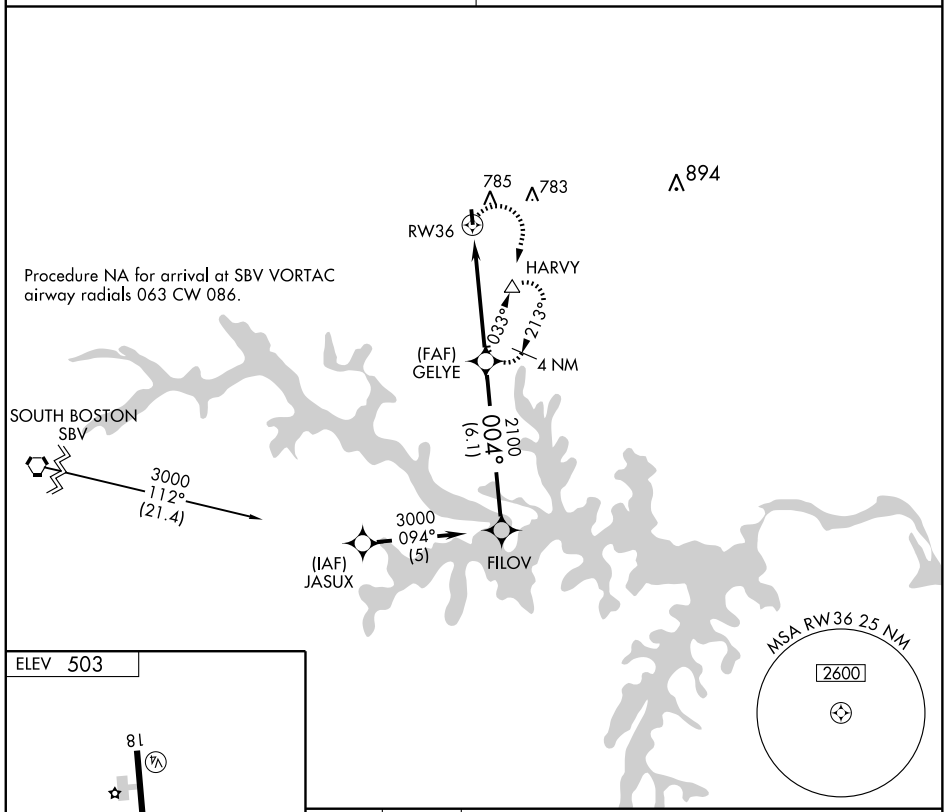
APP CRS	Rwy ldg	3400
004°	TDZE	503
	Apt Elev	503

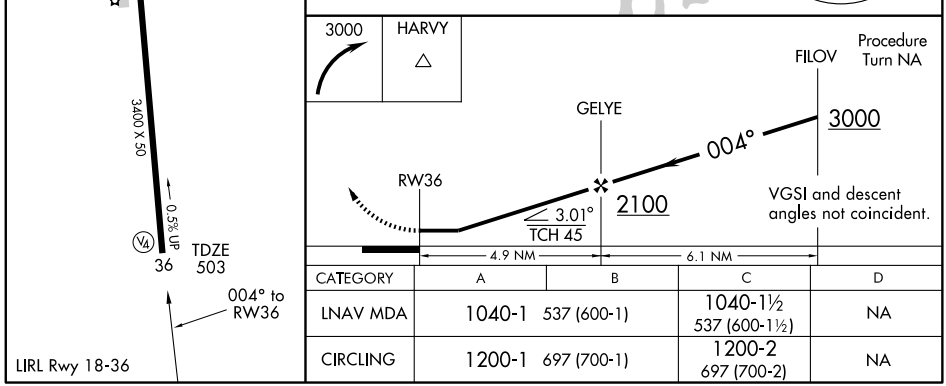
RNAV (GPS) RWY 36
CHASE CITY MUNI (CXE)

T NA DME/DME RNP-0.3 NA. Circling to Rwy 18 NA at night. Use Mecklenburg-Brunswick altimeter setting; if not received, use Danville altimeter setting and increase all MDA's 60 feet.

MISSED APPROACH: Climbing right turn to 3000 direct HARVY and hold.

WASHINGTON CENTER	UNICOM
118.75 353.9	**122.9** (CTAF)





CATEGORY	A	B	C	D
LNAV MDA	1040-1 537 (600-1)		1040-1½ 537 (600-1½)	NA
CIRCLING	1200-1 697 (700-1)		1200-2 697 (700-2)	NA

APP CRS	Rwy ldg	4488
036°	TDZE	403
	Apt Elev	421

GPS RWY 4

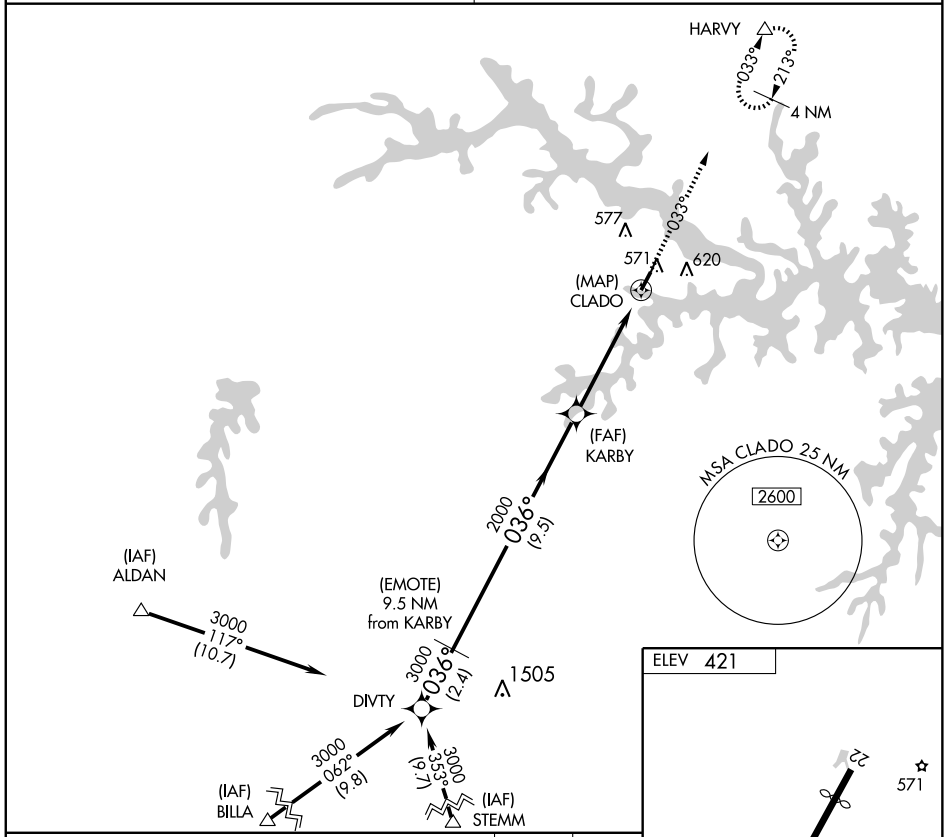
CLARKSVILLE/LAKE COUNTRY RGNL (W63)

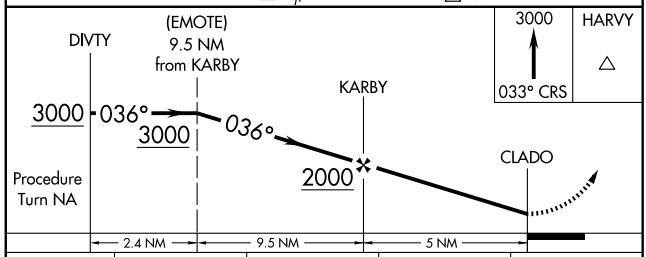
Use Mecklenburg-Brunswick Rgnl, VA altimeter setting.
NA Procedure not authorized at night.

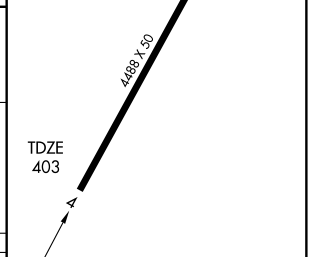
MISSED APPROACH: Climb to 3000 via 033° course to HARVY WP and hold.

WASHINGTON CENTER
118.75 377.1

CTAF **122.9**







CATEGORY	A	B	C	D
S-4	820-1 417 (400-1)		820-1¼ 417 (400-1¼)	
CIRCLING	1000-1 579 (600-1)	1040-1 619 (700-1)	1040-1¾ 619 (700-1¾)	1040-2 619 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC SBV 110.4 Chan 41	APP CRS 107°	Rwy ldg N/A TDZE N/A Apt Elev 421

VOR/DME-A

CLARKSVILLE/LAKE COUNTRY RGNL (W63)

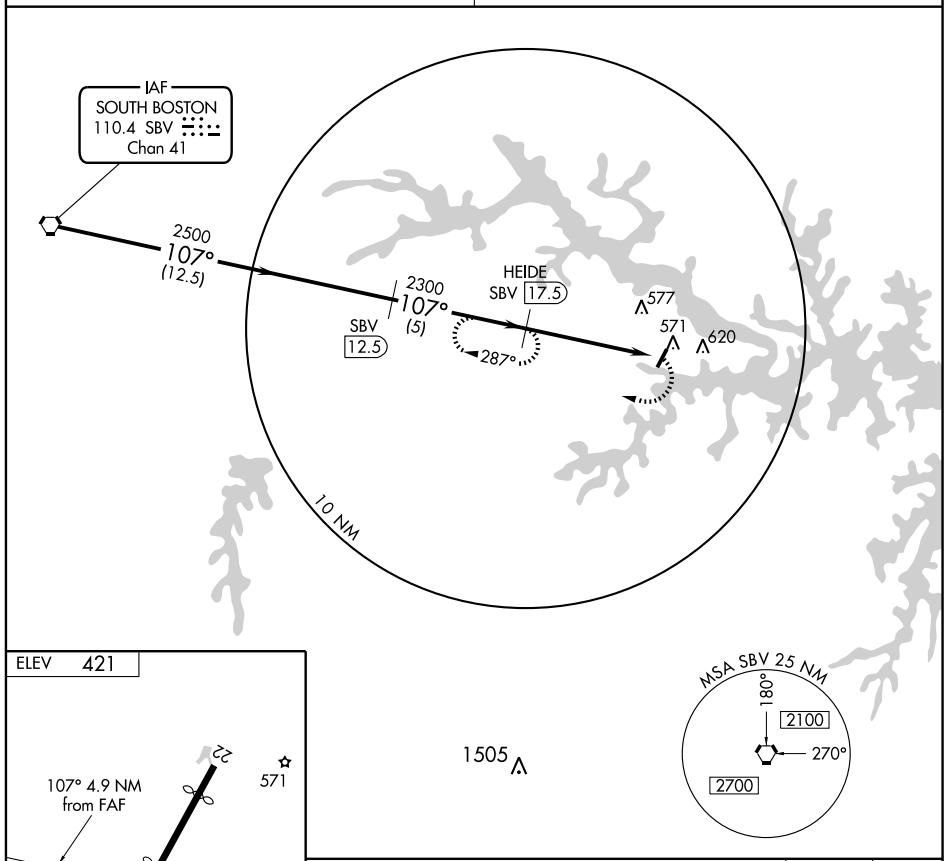
NA

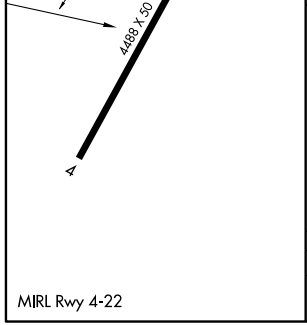
Use Mecklenburg-Brunswick Rgnl, VA altimeter setting.

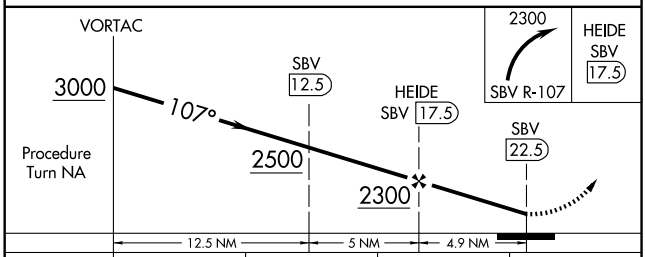
MISSED APPROACH: Climbing right turn to 2300 via SBV R-107 to HEIDE/ 17.5 DME and hold.

WASHINGTON CENTER
118.75 377.1

CTAF **122.9**







CATEGORY	A	B	C	D
CIRCLING	1000-1 579 (600-1)	1040-1 619 (700-1)	1040-1¾ 619 (700-1¾)	1040-2 619 (700-2)

CULPEPER, VIRGINIA

AL-5877 (FAA)

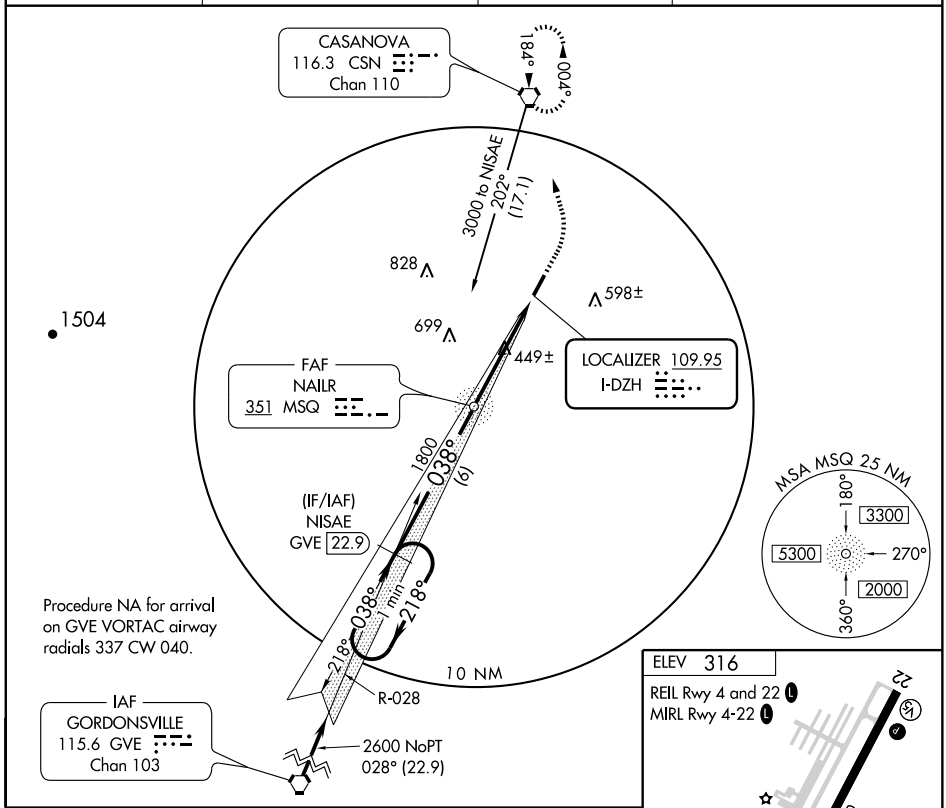
LOC I-DZH	APP CRS	Rwy ldg	5000
109.95	038°	TDZE	316
		Apt Elev	316

LOC RWY 4
CULPEPER RGNL (CJR)

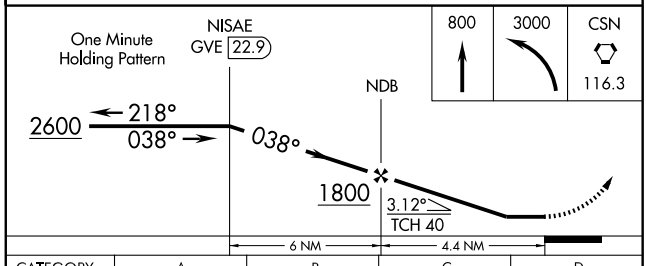
ADF required.

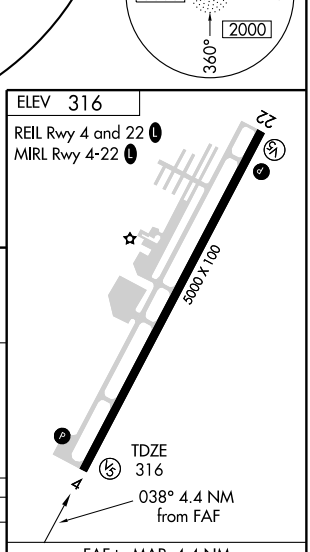
MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct CSN VORTAC and hold, continue climb-in-hold to 3000.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
119.325	124.65 306.925	135.075	123.075 (CTAF) L



Procedure NA for arrival on GVE VORTAC airway radials 337 CW 040.





CATEGORY	A	B	C	D
S-4	700-1 384 (400-1)			NA
CIRCLING	820-1 504 (600-1)	920-1 604 (700-1)	920-1¾ 604 (700-1¾)	NA

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NE-3, 14 JAN 2010 to 11 FEB 2010

CULPEPER, VIRGINIA

AL-5877 (FAA)

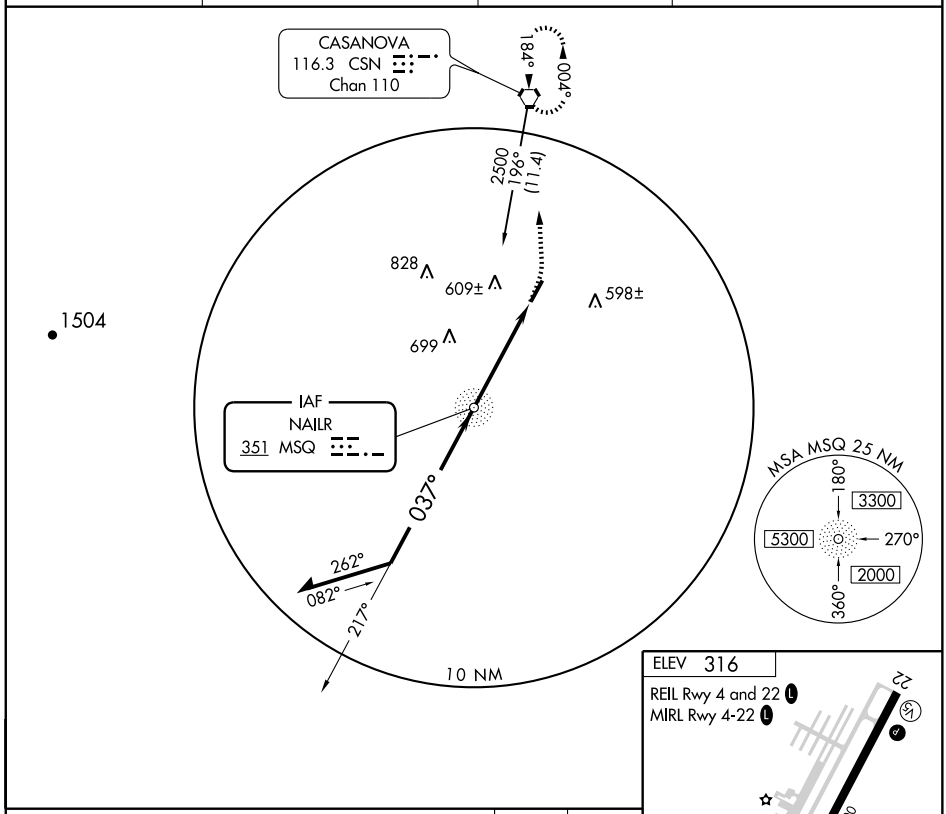
NDB MSQ	APP CRS	Rwy ldg	5000
351	037°	TDZE	316
		Apt Elev	316

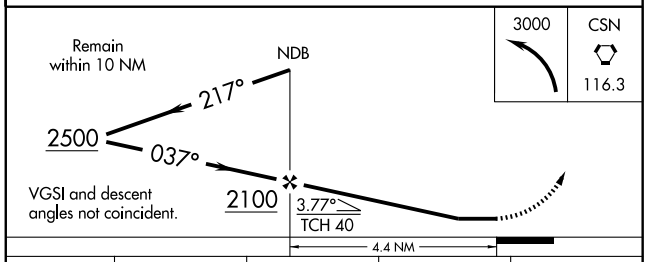
NDB RWY 4

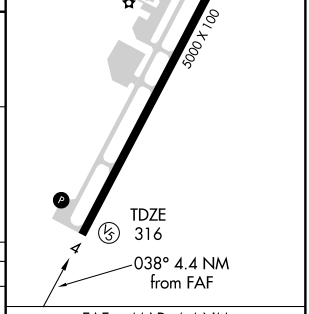
CULPEPER RGNL (CJR)

MISSED APPROACH: Climbing left turn to 3000 direct CSN VORTAC and hold, continue climb-in-hold to 3000.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
119.325	124.65 306.925	135.075	123.075 (CTAF) L







CATEGORY	A	B	C	D
S-4	920-1 604 (700-1)		920-1¾ 604 (700-1¾)	NA
CIRCLING	920-1 604 (700-1)		920-1¾ 604 (700-1¾)	NA

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NE-3. 14 JAN 2010 to 11 FEB 2010

CULPEPER, VIRGINIA

AL-5877 (FAA)

WAAS CH 77606 W04A	APP CRS 038°	Rwy ldg 5000 TDZE 316 Apt Elev 316

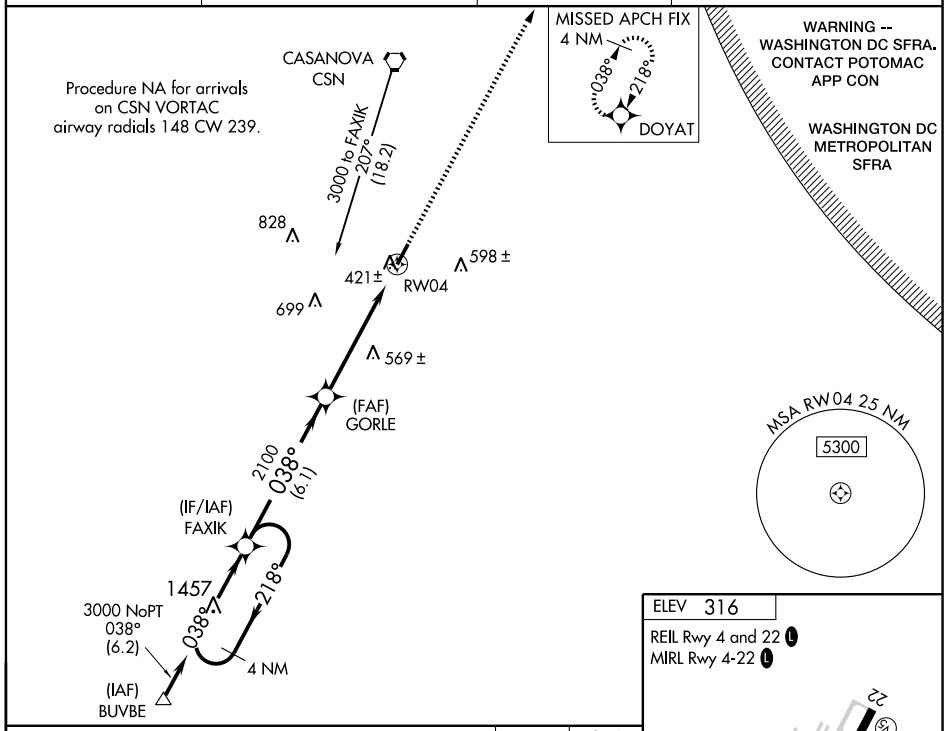
RNAV (GPS) RWY 4

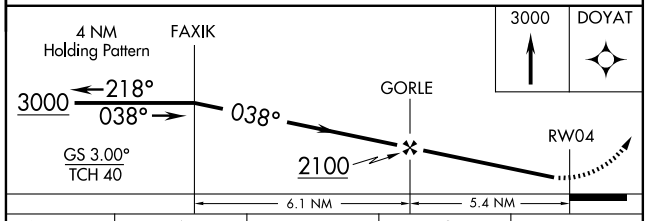
CULPEPER RGNL (CJR)

When VGSI inop, procedure NA at night. Baro-VNAV NA when using Washington Dulles Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs 73 feet, all MDAs 80 feet, LPV and LNAV/VNAV Cats visibility ¼ mile, LNAV Cat D and Circling Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct DOYAT and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
119.325	124.65 306.925	135.075	123.075 (CTAF) L



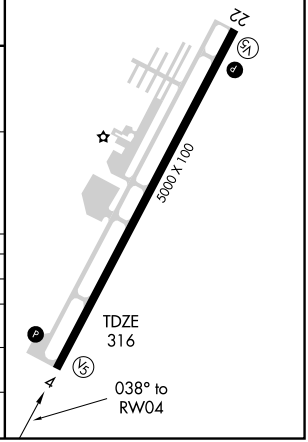


CATEGORY	A	B	C	D
LPV DA	610-1 294 (300-1)			
LNAV/VNAV DA	833-1¾ 517 (600-1¾)			
LNAV MDA	820-1 504 (600-1)		820-1½ 504 (600-1½)	
CIRCLING	900-1 584 (600-1)	960-1 644 (700-1)	960-1¾ 644 (700-1¾)	960-2 644 (700-2)

ELEV 316

REIL Rwy 4 and 22 L

MIRL Rwy 4-22 L



NE-3, 14 JAN 2010 to 11 FEB 2010

CULPEPER, VIRGINIA

AL-5877 (FAA)

RNAV (GPS) RWY 22

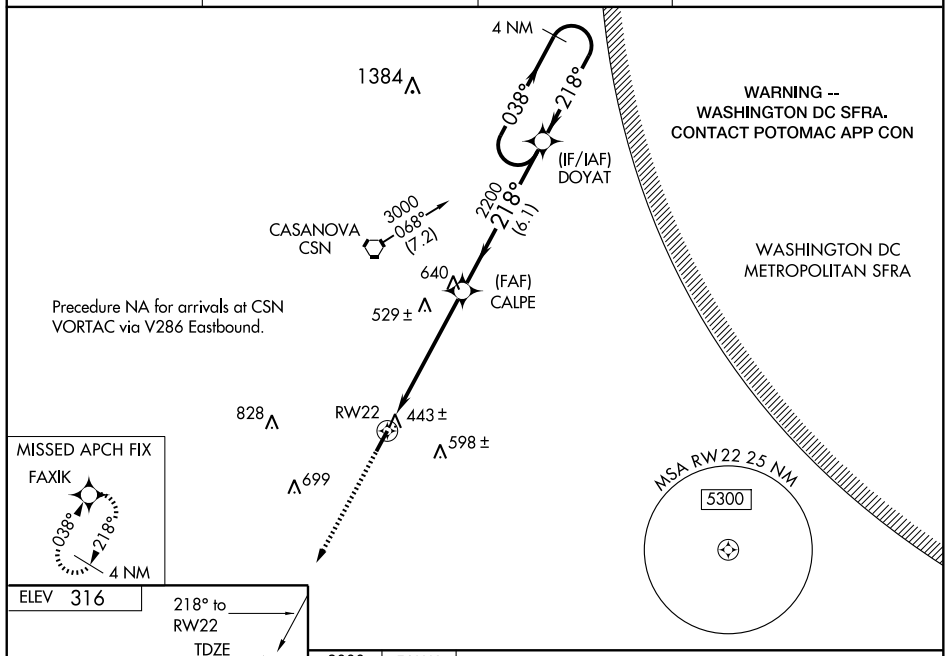
CULPEPER RGNL (CJR)

WAAS CH 56306 W22A	APP CRS 218°	Rwy ldg 5000 TDZE 315 Apt Elev 316

When VGSI inop, procedure NA at night. Baro-VNAV NA when using Washington Dulles Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not recieved, use Washington Dulles Intl altimeter setting and increase all DAs/MDAs 80 feet, LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV and Circling Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct FAXIK and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
119.325	124.65 306.925	135.075	123.075 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	657-1¼ 342 (400-1¼)			
LNAV/VNAV DA	703-1½ 388 (400-1½)			
LNAV MDA	800-1 485 (500-1)		800-1¼ 485 (500-1¼)	800-1½ 485 (500-1½)
CIRCLING	900-1 584 (600-1)	960-1 644 (700-1)	960-1¾ 644 (700-1¾)	960-2 644 (700-2)

REIL Rwy 4 and 22 L
MIRL Rwy 4-22 L

NE-3, 14 JAN 2010 to 11 FEB 2010

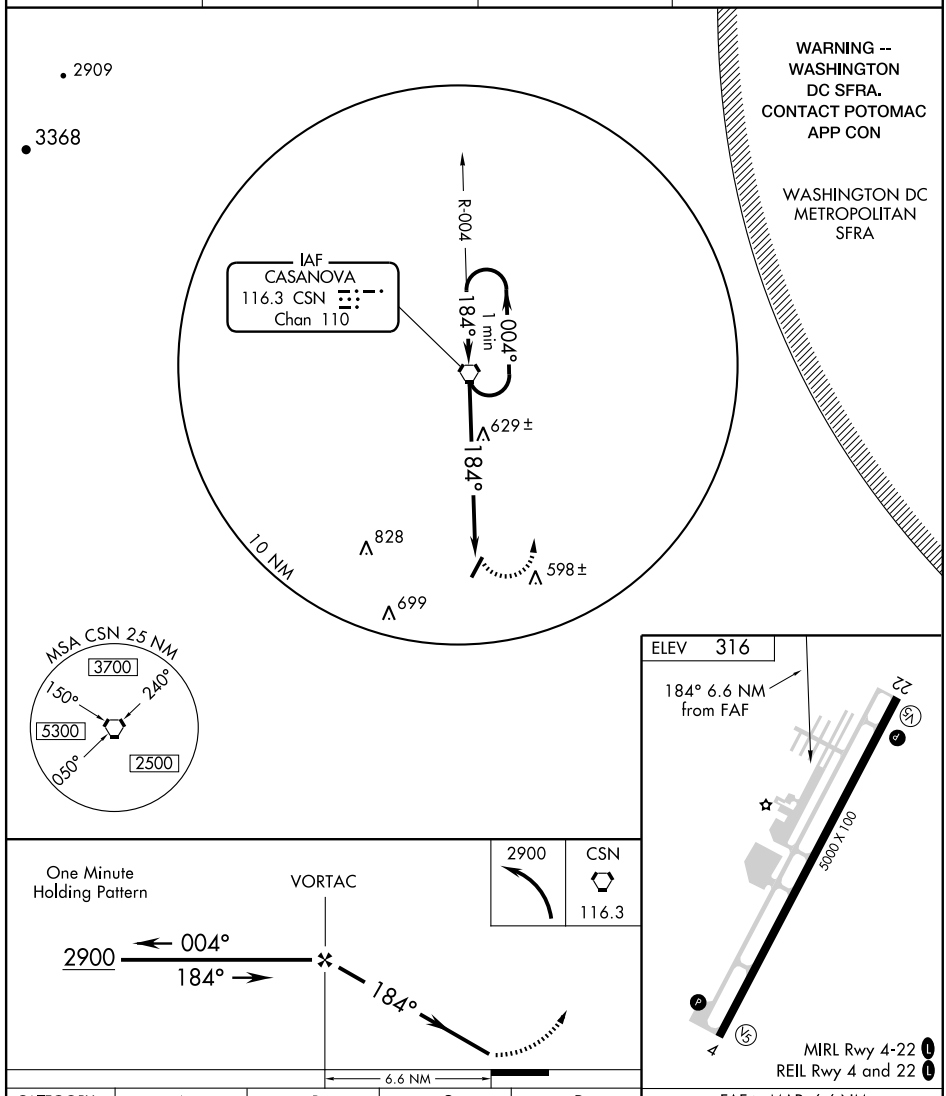
VORTAC CSN	APP CRS	Rwy ldg	N/A
116.3	184°	TDZE	N/A
Chan 110		Apt Elev	316

VOR-A
CULPEPER RGNL (CJR)

When VGSI inop, procedure NA at night. Visibility reduction by Helicopters NA. When local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs/MDAs 80 feet, Circling Cats C and D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 2900 direct CSN VORTAC and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
119.325	124.65 306.925	135.075	123.075 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	920-1 604 (700-1)	960-1 644 (700-1)	960-1¾ 644 (700-1¾)	960-2 644 (700-1)

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5600
202°	TDZE	568
	Apt Elev	572

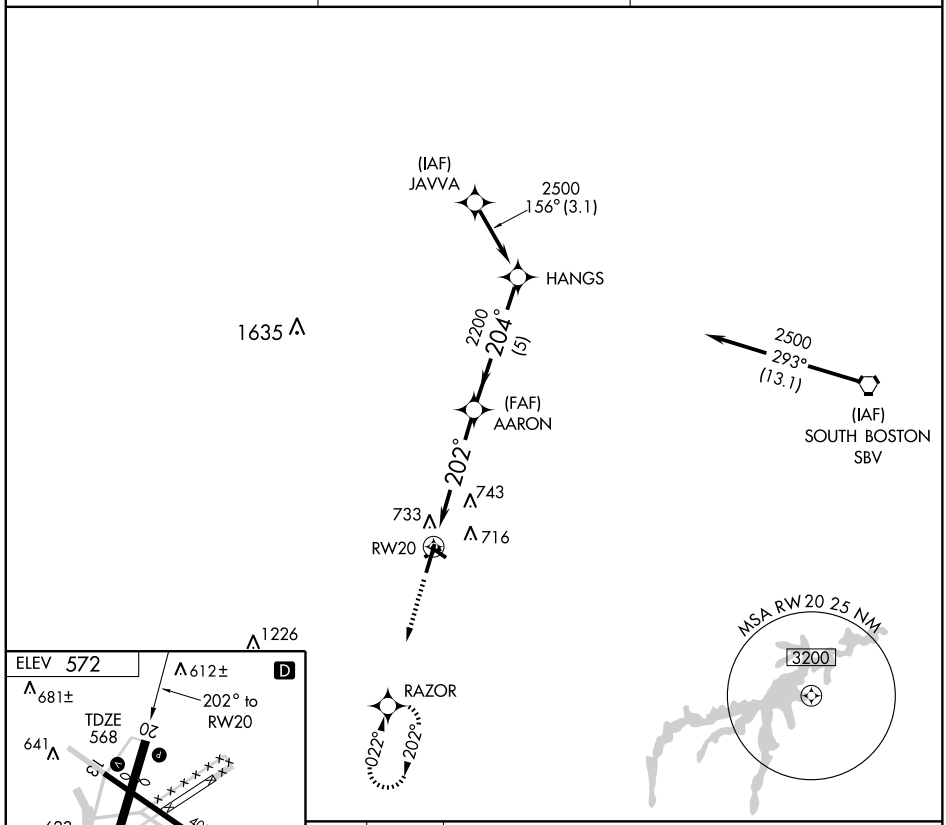
GPS RWY 20
DANVILLE RGNL (DAN)

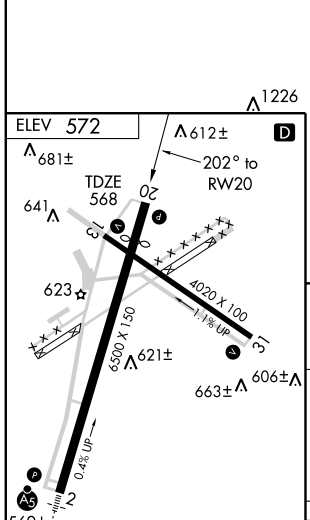
If local altimeter setting not received, use Greensboro, NC altimeter setting and increase all MDAs 160 feet.

NA

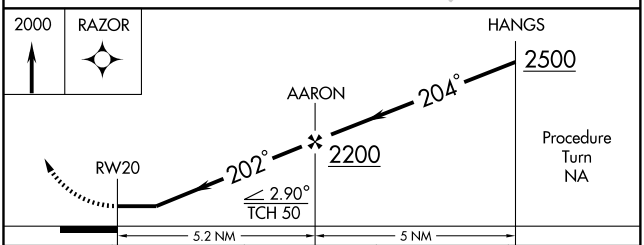
MISSED APPROACH: Climb to 2000 direct RAZOR WP and hold.

ASOS	WASHINGTON CENTER	UNICOM
128.125	124.05 307.0	123.05 (CTAF) L





HIRL Rwy 2-20 L
MIRL Rwy 13-31 L
REIL Rwys 13, 20 and 31 L



CATEGORY	A	B	C	D
S-20	1000-1 432 (500-1)		1000-1¼ 432 (500-1¼)	1000-1½ 432 (500-1½)
CIRCLING	1060-1 488 (500-1)		1060-1½ 488 (500-1½)	1140-2 568 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC I-DAN	APP CRS	Rwy ldg	5600
110.7	022°	TDZE	559
		Apt Elev	572

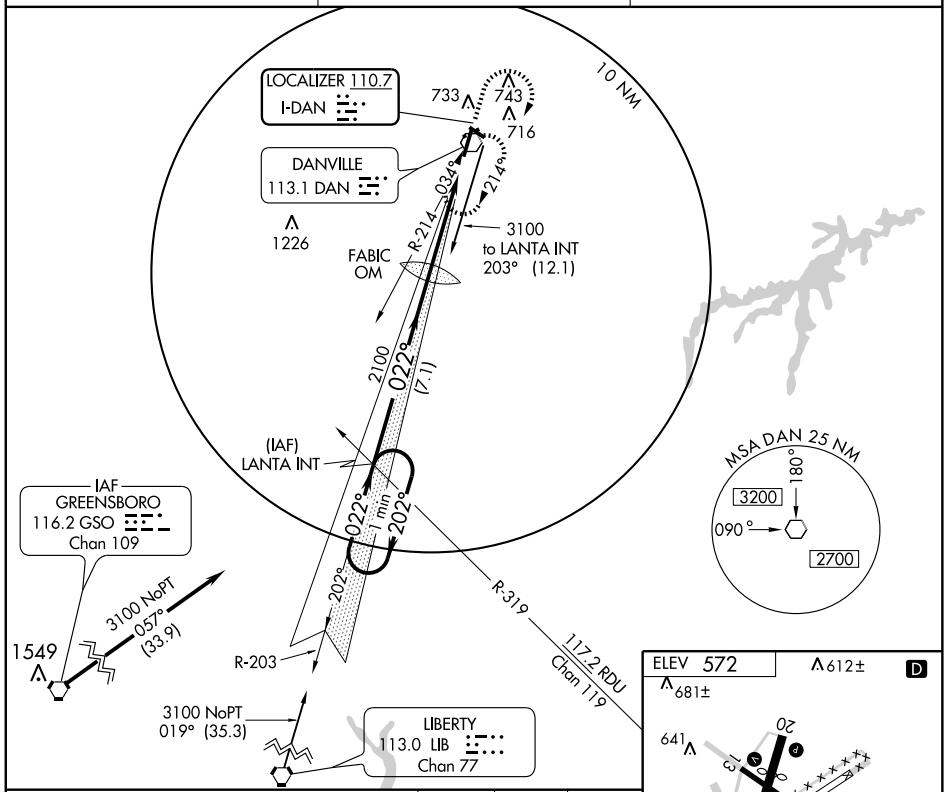
ILS RWY 2
DANVILLE RGNL (DAN)

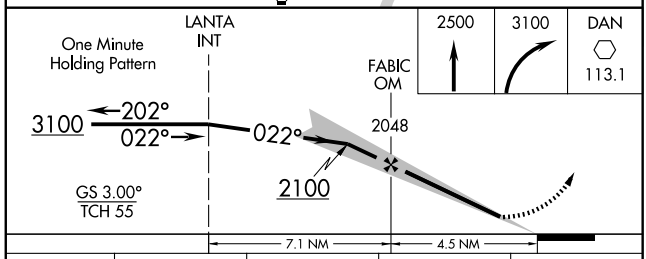
For inoperative MALSR, increase S-LOC 2 Cat D visibility to 1.

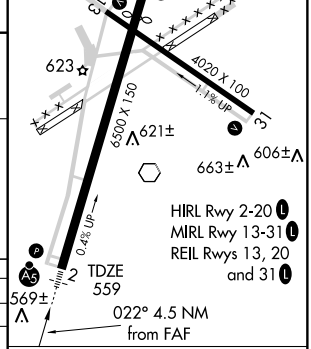
MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3100 direct DAN VOR and hold.

ASOS	WASHINGTON CENTER	UNICOM
128.125	124.05 307.0	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 2	759-½ 200 (200-½)			
S-LOC 2	900-½ 341 (400-½)			900-¾ 341 (400-¾)
CIRCLING	1060-1 488 (500-1)		1060-1½ 488 (500-1½)	1140-2 568 (600-2)

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

NE-3. 14 JAN 2010 to 11 FEB 2010

VOR DAN 113.1	APP CRS 034°	Rwy ldg 5600 TDZE 558 Apt Elev 571

VOR RWY 2
DANVILLE RGNL (DAN)

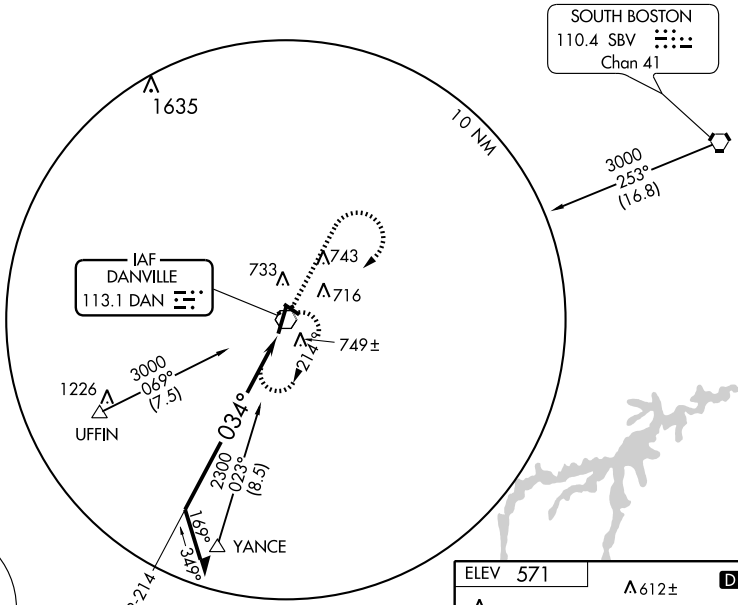
When local altimeter setting not received, use Piedmont Triad Intl altimeter setting and increase all MDA 160 feet and Cats B/C/D visibilities ½mile. Inoperative table does not apply to S-2 Cats C/D. For inoperative MALSR, increase S-2 Cats A/B visibility to 1. When using Piedmont Triad Intl altimeter setting, inoperative table does not apply to Cats B/C/D. For inoperative MALSR, increase S-2 Cat A visibility to 1. Visibility reduction by helicopters NA.

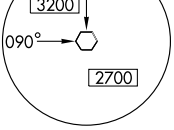
NA

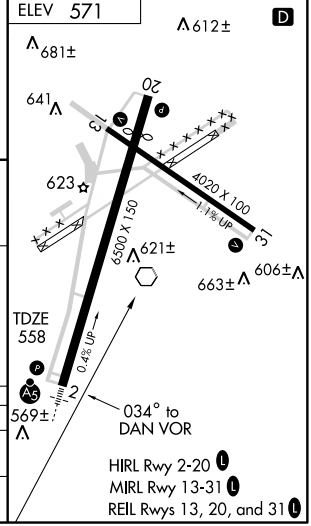
MALSR A5

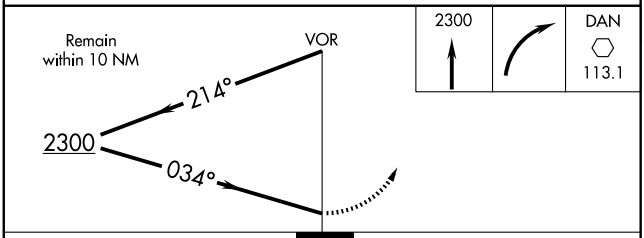
MISSED APPROACH: Climb to 2300 then right turn direct DAN VOR and hold.

ASOS	WASHINGTON CENTER	UNICOM
128.125	124.05 307.0	123.05 (CTAF) L









CATEGORY	A	B	C	D
S-2	1160-¾ 602 (600-¾)		1160-1¾ 602 (600-1¾)	1160-2 602 (600-2)
CIRCLING	1160-1 589 (600-1)		1160-1¾ 589 (600-1¾)	1160-2 589 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

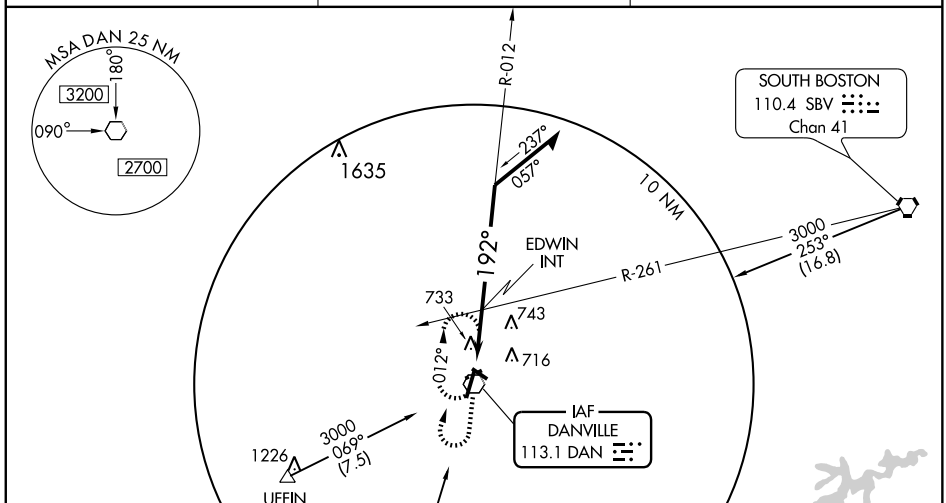
VOR DAN 113.1	APP CRS 192°	Rwy ldg 5600 TDZE 568 Apt Elev 572

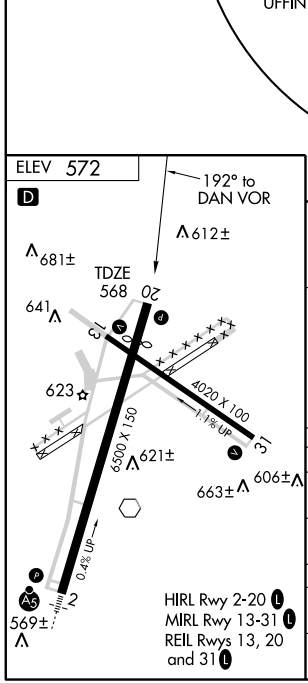
VOR RWY 20
DANVILLE RGNL (DAN)

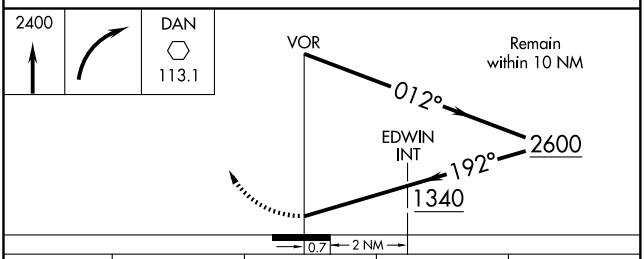
If local altimeter setting not received, procedure not authorized.

MISSED APPROACH: Climb to 2400 then right turn direct DAN VOR and hold.

ASOS	WASHINGTON CENTER	UNICOM
128.125	124.05 307.0	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-20	1340-1 772 (800-1)	1340-1¼ 772 (800-1¼)	1340-2¼ 772 (800-2¼)	1340-2½ 772 (800-2½)
CIRCLING	1340-1 768 (800-1)	1340-1¼ 768 (800-1¼)	1340-2¼ 768 (800-2¼)	1340-2½ 768 (800-2½)
EDWIN INT MINIMUMS				
S-20	1000-1 432 (500-1)		1000-1¼ 432 (500-1¼)	1000-1½ 432 (500-1½)
CIRCLING	1060-1 488 (500-1)		1060-1½ 488 (500-1½)	1140-2 568 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

DUBLIN, VIRGINIA

AL-5084 (FAA)

LOC I-PSK	APP CRS	Rwy ldg	6201
110.9	058°	TDZE	2105
		Apt Elev	2105

ILS or LOC RWY 6

DUBLIN/NEW RIVER VALLEY (PSK)

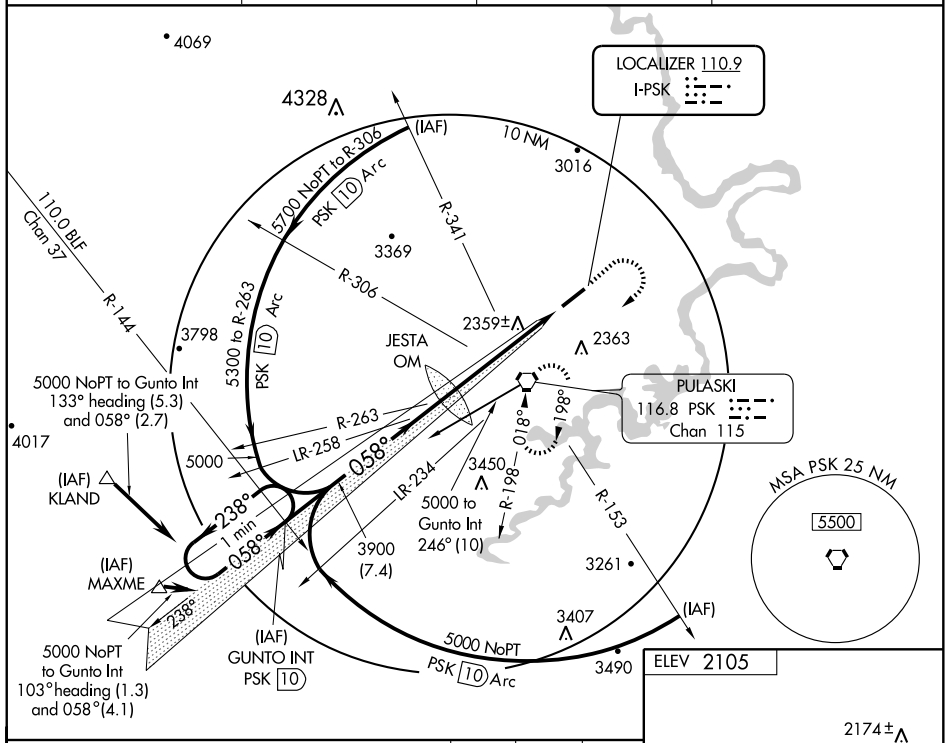
Inoperative table does not apply to S-ILS.
Inoperative table does not apply to S-LOC 6 Cats A and B.
Visibility reduction by helicopters NA.

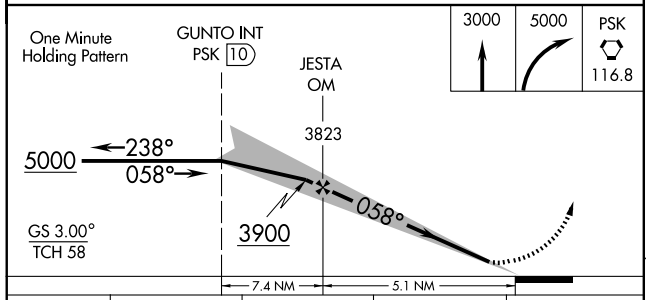
NA

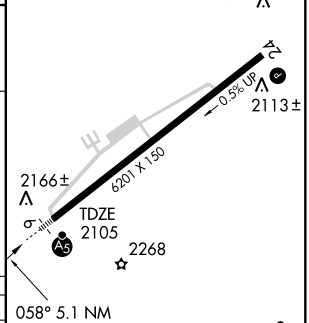
MALSR

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 direct PSK VORTAC and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
127.375	126.0 339.8	121.7	122.7 (CTAF)







CATEGORY	A	B	C	D
S-ILS 6	2314-1 209 (300-1)			
S-LOC 6	2620-1 515 (600-1)			2620-1¼ 515 (600-1¼)
CIRCLING	2620-1 515 (600-1)		2620-1½ 515 (600-1½)	2680-2 575 (600-2)

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS Chan **86227** **W24A**	APP CRS **238°**	Rwy ldg **6201** TDZE **2087** Apt Elev **2105**

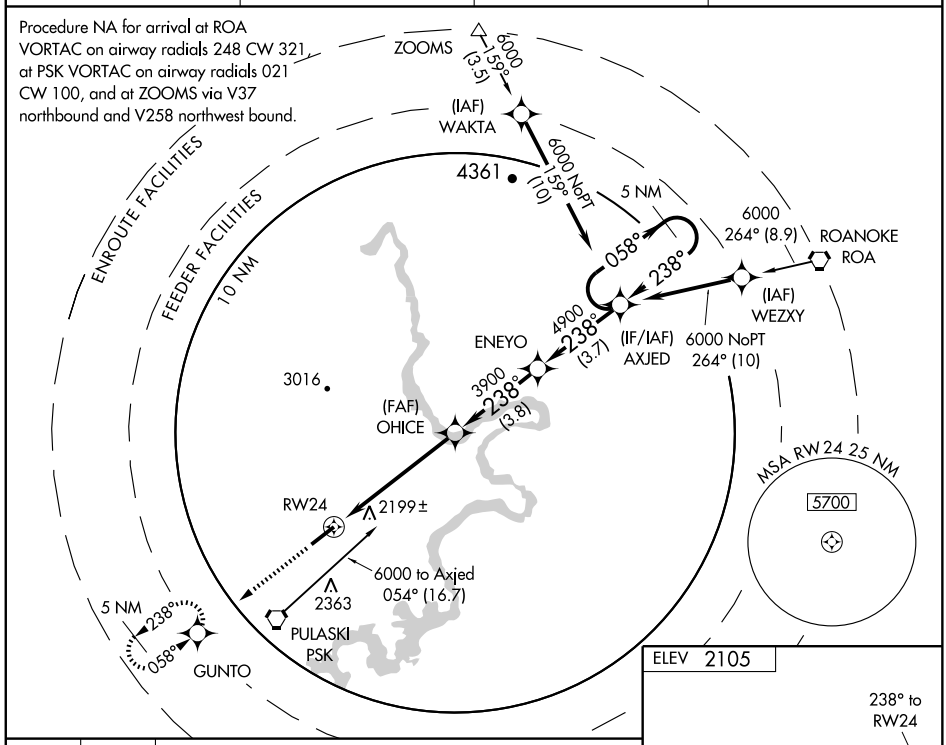
RNAV (GPS) RWY 24
DUBLIN/ NEW RIVER VALLEY (PSK)

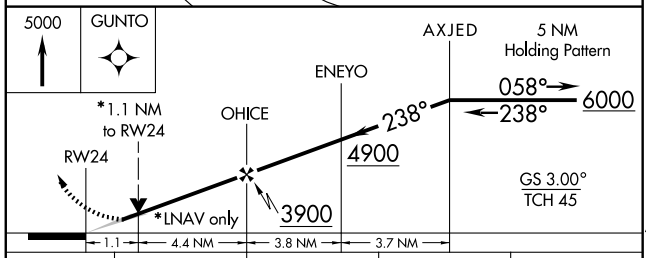
DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F). VDP and Baro-VNAV NA when using Virginia Tech/Montgomery Executive altimeter setting. If local altimeter setting not received, use Virginia Tech/ Montgomery Executive altimeter setting and increase all DAs/MDAs 40 feet.

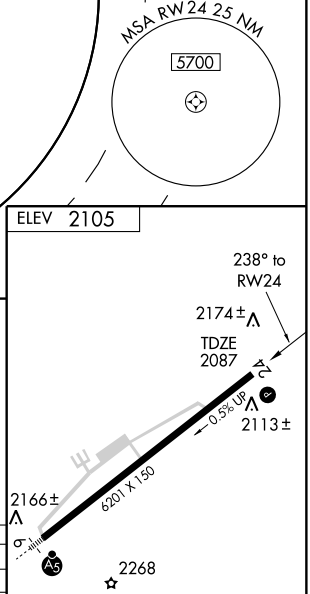
NA

MISSED APPROACH: Climb to 5000 direct GUNTO and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
127.375	**126.0 339.8**	**121.7**	**122.7** (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2337-1 250 (300-1)			
LNAV/ VNAV DA	2346-1 259 (300-1)			
LNAV MDA	2460-1 373 (400-1)			2460-1¼ 373 (400-1¼)
CIRCLING	2620-1 515 (600-1)		2660-1½ 555 (600-1½)	2680-2 575 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC PSK 116.8 Chan 115	APP CRS 031°	Rwy ldg 6201 TDZE 2105 Apt Elev 2105

VOR/DME or GPS RWY 6

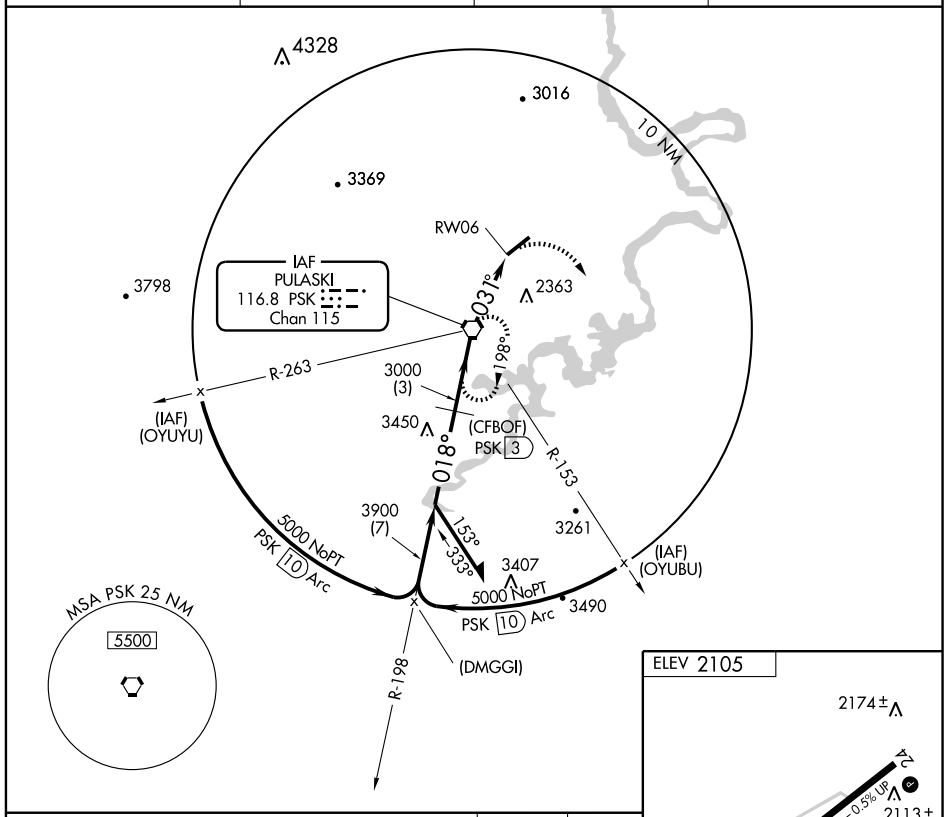
DUBLIN/ NEW RIVER VALLEY (PSK)

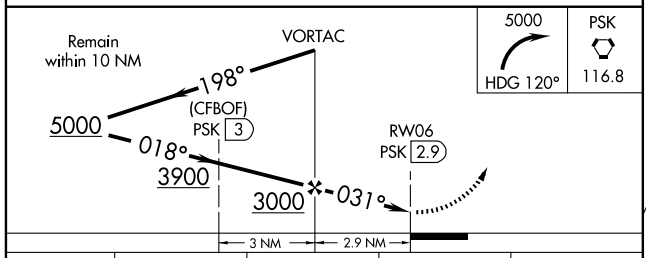
Inoperative table does not apply.

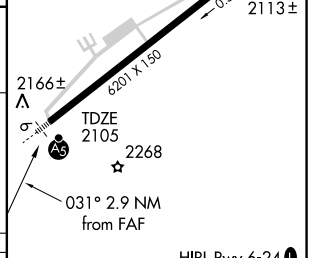
MALSR

MISSED APPROACH: Climbing right turn to 5000 via heading 120° then direct PSK VORTAC and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
127.375	126.0 339.8	121.7	122.7 (CTAF) L







HIRL Rwy 6-24 L
REIL Rwy 24 L

CATEGORY	A	B	C	D
S-6	2620-1 515 (600-1)		2620-1½ 515 (600-1½)	2620-1¾ 515 (600-1¾)
CIRCLING	2620-1 515 (600-1)		2620-1½ 515 (600-1½)	2680-2 575 (600-2)

Knots	60	90	120	150	180
Min:Sec					

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC PSK 116.8 Chan 115	APP CRS 031°	Rwy ldg 6201 TDZE N/A Apt Elev 2105

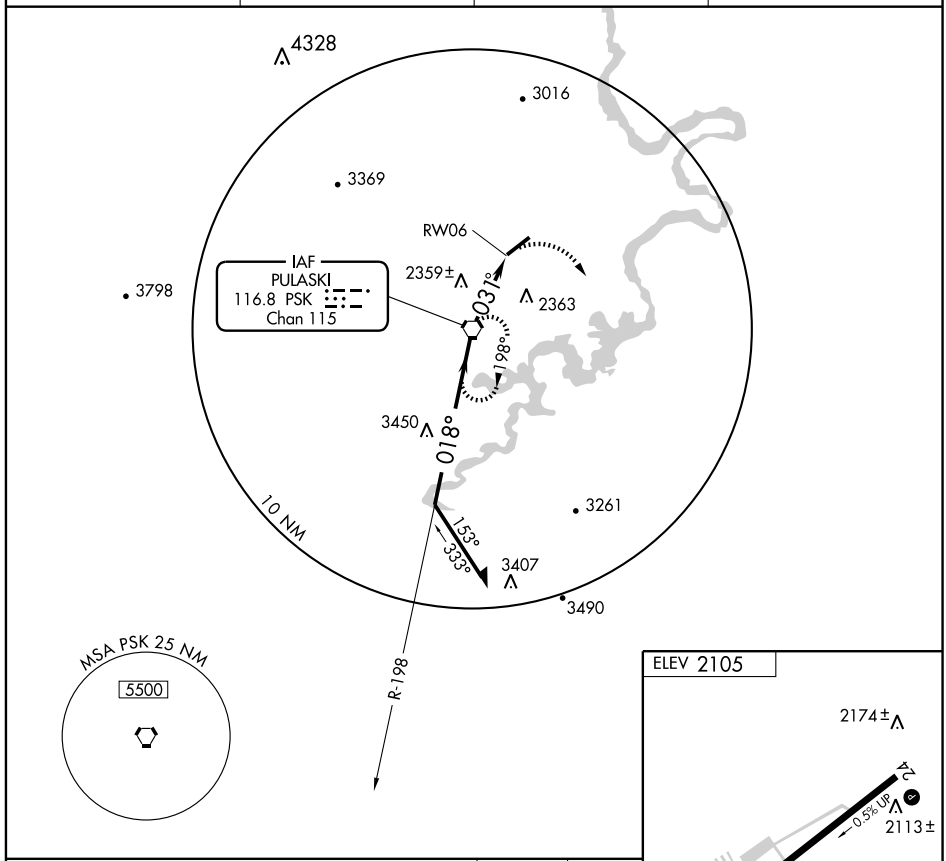
VOR or GPS-A

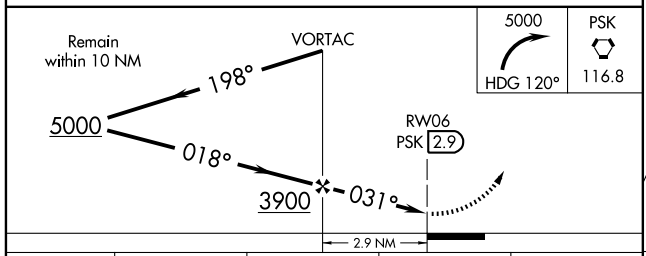
DUBLIN/ NEW RIVER VALLEY (PSK)

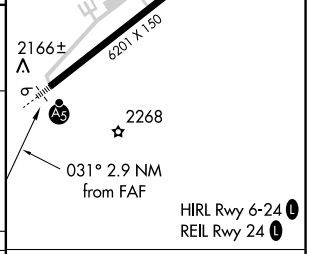
MALSR

MISSED APPROACH: Climbing right turn to 5000 via heading 120° then direct PSK VORTAC and hold.

AWOS-3	ROANOKE APP CON	ROANOKE CLNC DEL	UNICOM
127.375	126.0 339.8	121.7	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	2740-1 635 (700-1)		2740-1¾ 635 (700-1¾)	2740-2¼ 635 (700-2¼)

FAF to MAP 2.9 NM					
Knots	60	90	120	150	180
Min:Sec	2:54	1:56	1:27	1:10	0:58

NE-3, 14 JAN 2010 to 11 FEB 2010

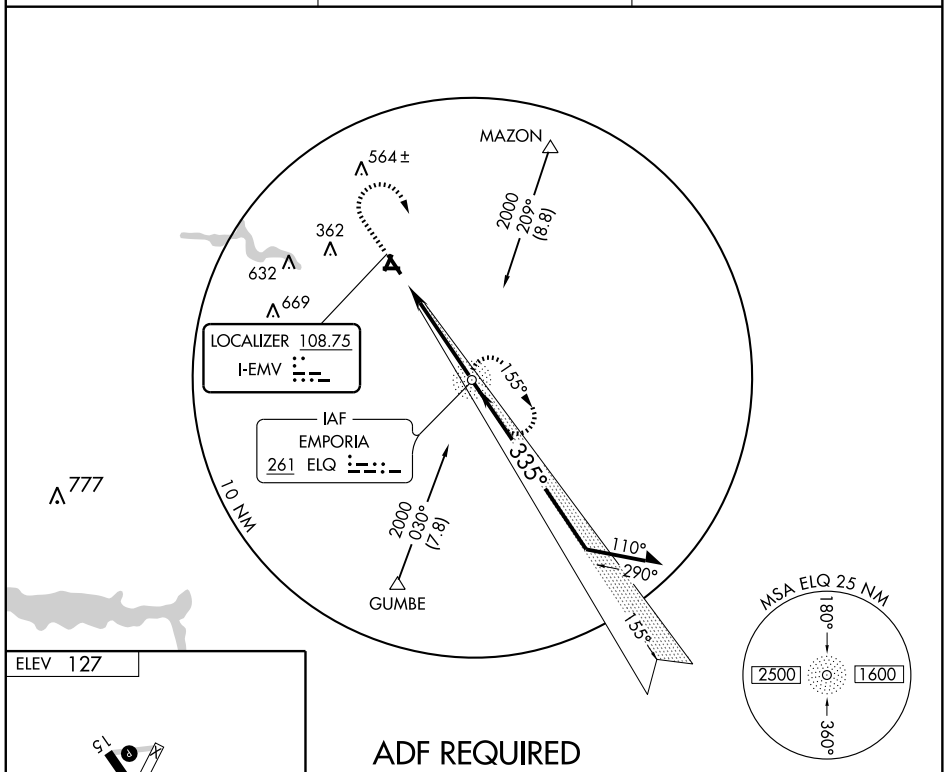
LOC I-EMV 108.75	APP CRS 335°	Rwy ldg 5010 TDZE 121 Apt Elev 127

LOC RWY 33
EMPORIA-GREENSVILLE RGNL (EMV)

NA

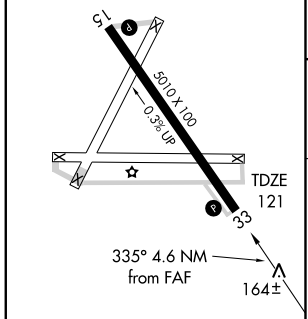
MISSED APPROACH: Climb to 600, then climbing right turn to 2000 direct ELQ NDB and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
124.175	132.025 269.4	123.0 (CTAF) L

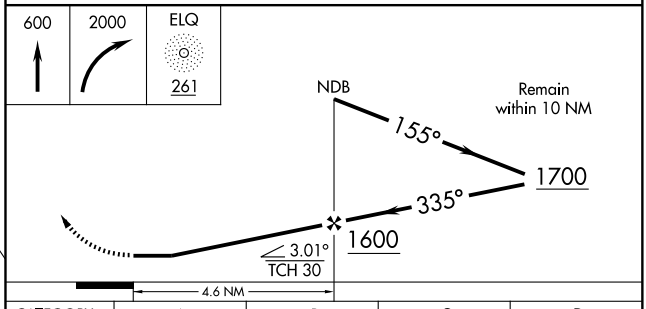


ADF REQUIRED

ELEV 127



REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L



FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

CATEGORY	A	B	C	D
S-LOC 33	420-1 299 (300-1)		NA	
CIRCLING	560-1 433 (500-1)	580-1 453 (500-1)	NA	

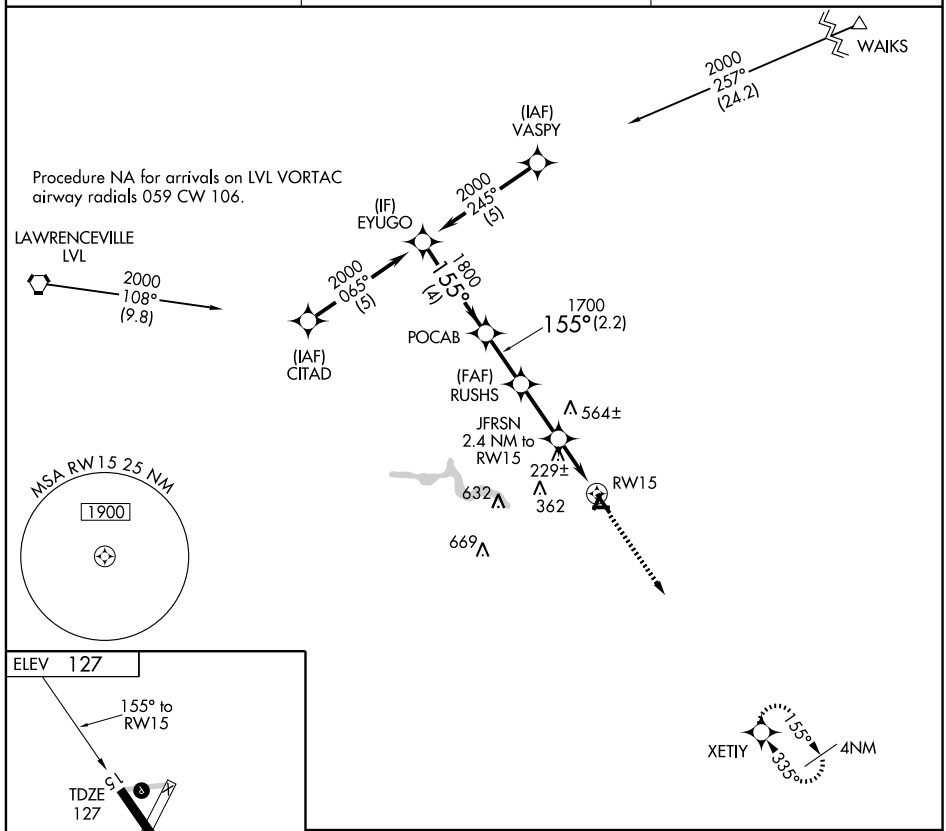
APP CRS	Rwy ldg	5010
155°	TDZE	127
	Apt Elev	127

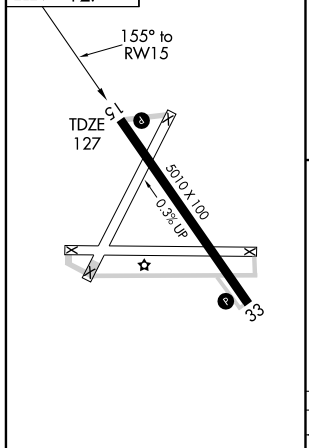
RNAV (GPS) RWY 15
EMPORIA-GREENSVILLE RGNL (EMV)

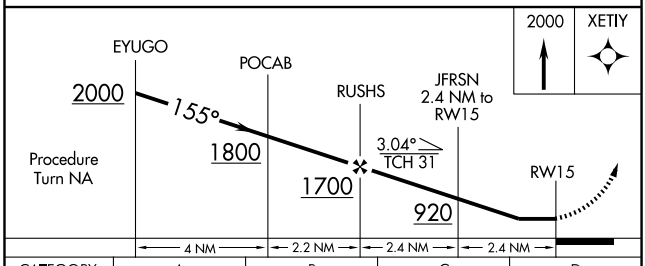
Procedure NA at night. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ahoskie altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000 direct XETIY and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
124.175	132.025 269.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	480-1	353 (400-1)	NA	
CIRCLING	560-1 433 (500-1)	580-1 453 (500-1)	NA	

REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L

NE-3. 14 JAN 2010 to 11 FEB 2010

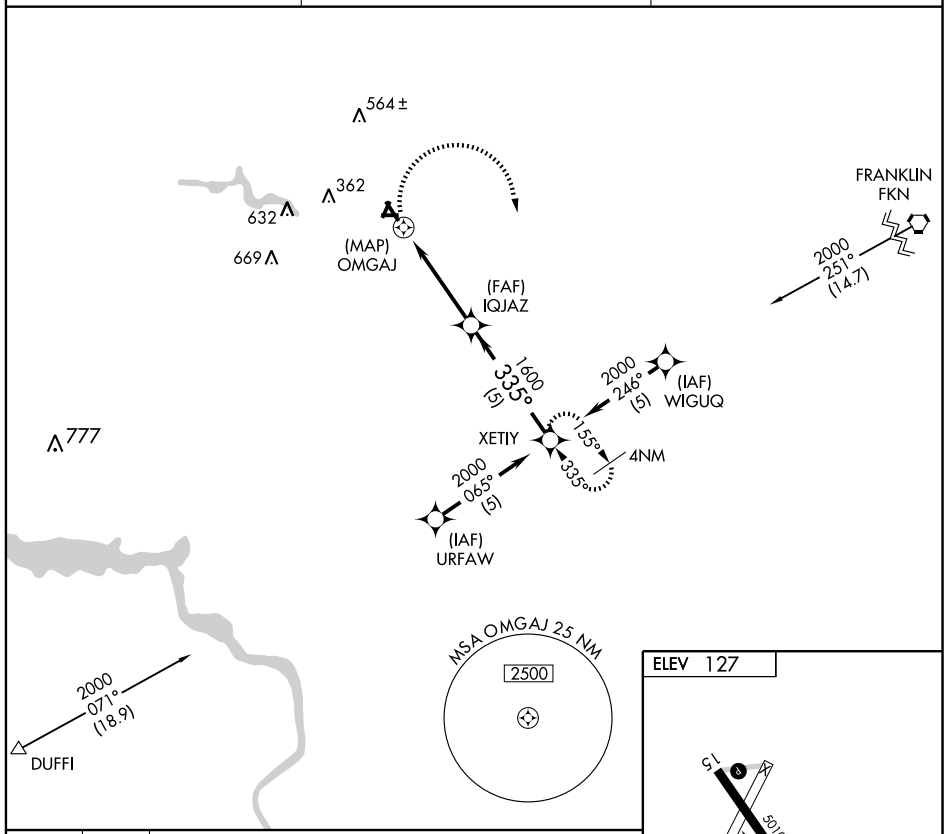
APP CRS	Rwy ldg	5010
335°	TDZE	121
	Apt Elev	127

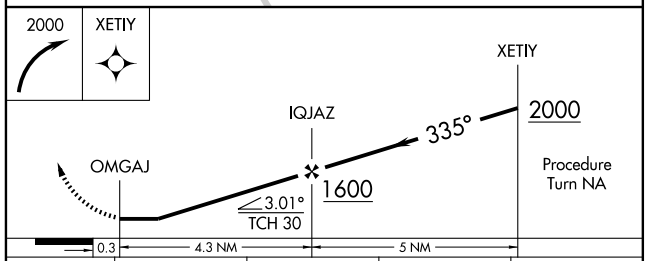
RNAV (GPS) RWY 33
EMPORIA-GREENSVILLE RGNL (EMV)

GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

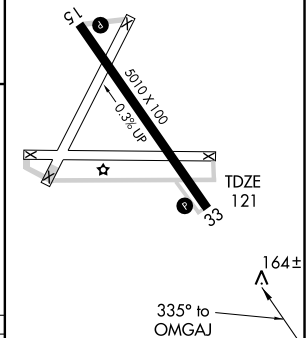
MISSED APPROACH: Climbing right turn to 2000 direct XETIY WP and hold.

AWOS-3	WASHINGTON CENTER		UNICOM
124.175	132.025	269.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	420-1 299 (300-1)		NA	
CIRCLING	560-1 433 (500-1)	580-1 453 (500-1)	NA	



REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L

NE-3. 14 JAN 2010 to 11 FEB 2010

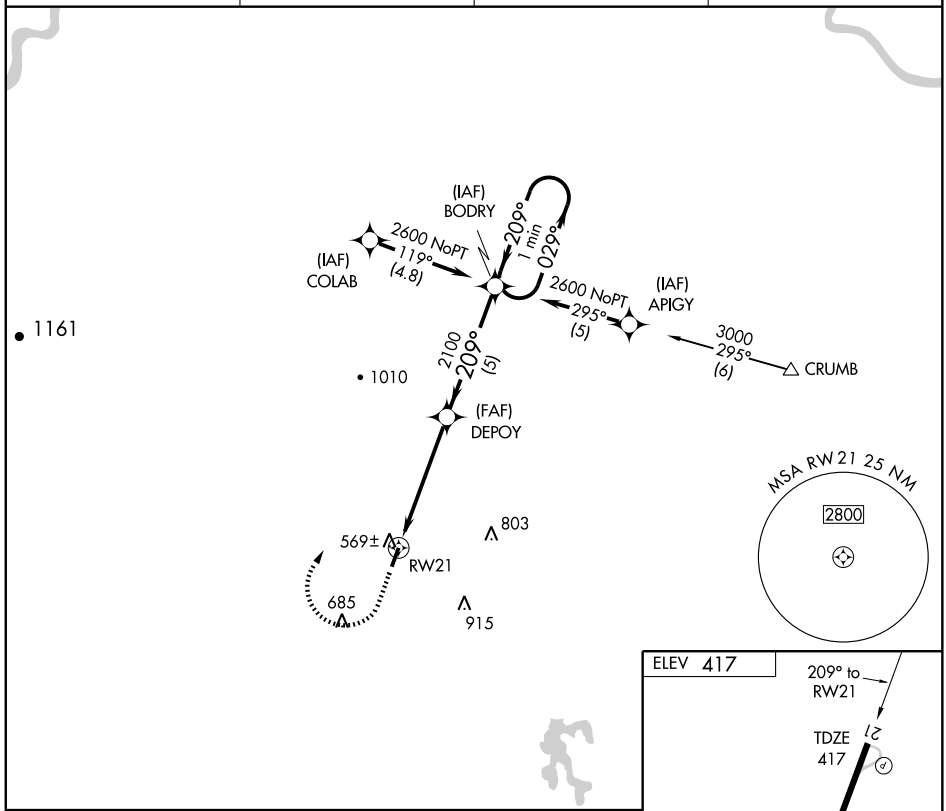
APP CRS	Rwy ldg	4400
209°	TDZE	417
	Apt Elev	417

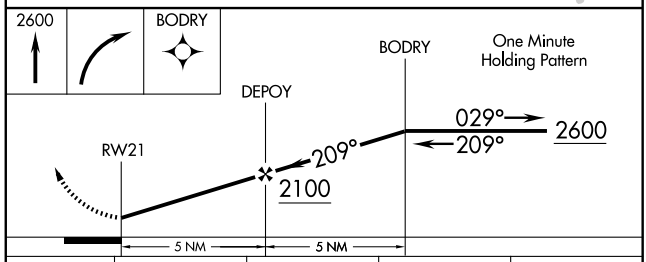
GPS RWY 21
FARMVILLE RGNL (FVX)

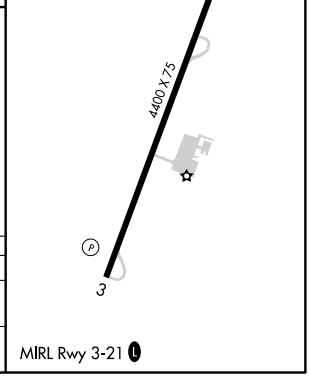
NA

MISSED APPROACH: Climb to 2600 then right turn direct BODRY WP and hold.

AWOS-3	WASHINGTON CENTER	UNICOM	GCO
132.725	135.4 263.1	122.8 (CTAF) L	135.075







CATEGORY	A	B	C	D
S-21	820-1 403 (500-1)		820-1¼ 403 (500-1¼)	NA
CIRCLING	900-1 483 (500-1)		920-1½ 503 (600-1½)	NA

NE-3. 14 JAN 2010 to 11 FEB 2010

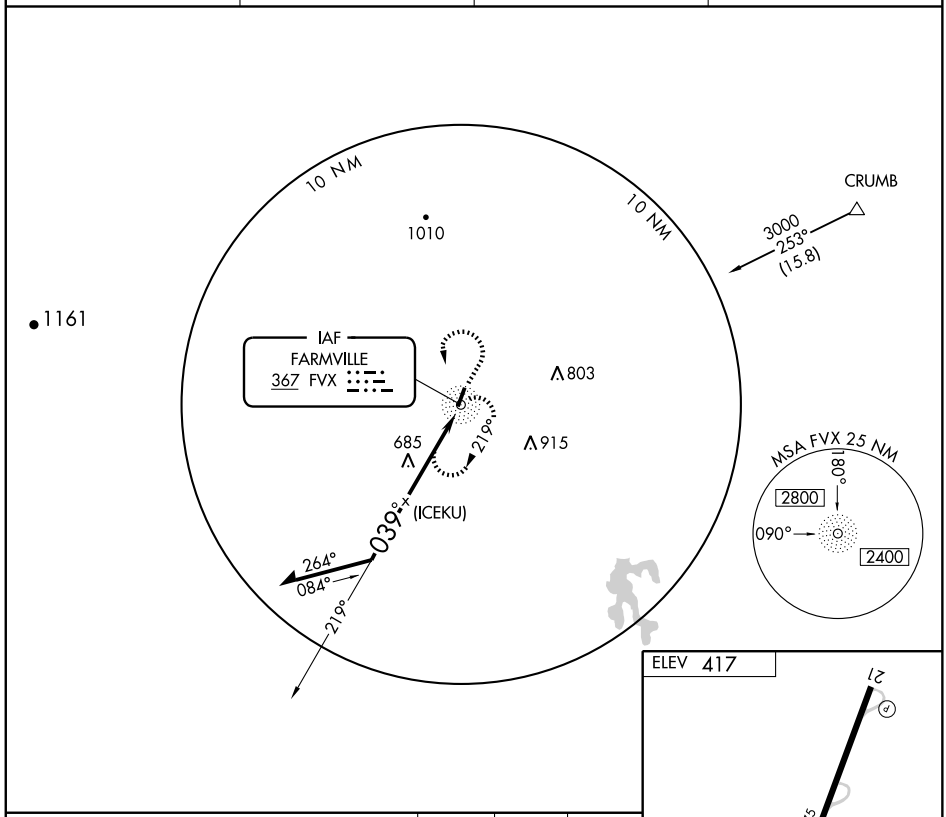
NDB FVX 367	APP CRS 039°	Rwy ldg 4400 TDZE 410 Apt Elev 417

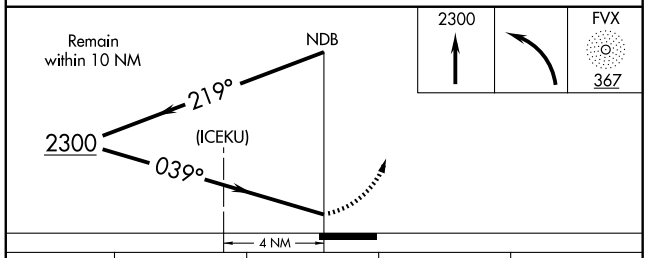
NDB or GPS RWY 3
FARMVILLE RGNL (FVX)

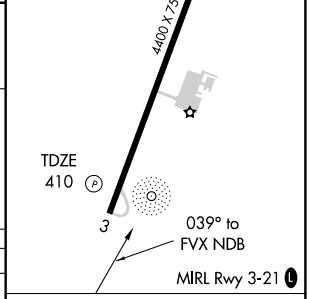
NA

MISSED APPROACH: Climb to 2300, then left turn direct FVX NDB and hold.

AWOS-3	WASHINGTON CENTER	UNICOM	GCO
132.725	135.4 263.1	122.8 (CTAF) L	135.075







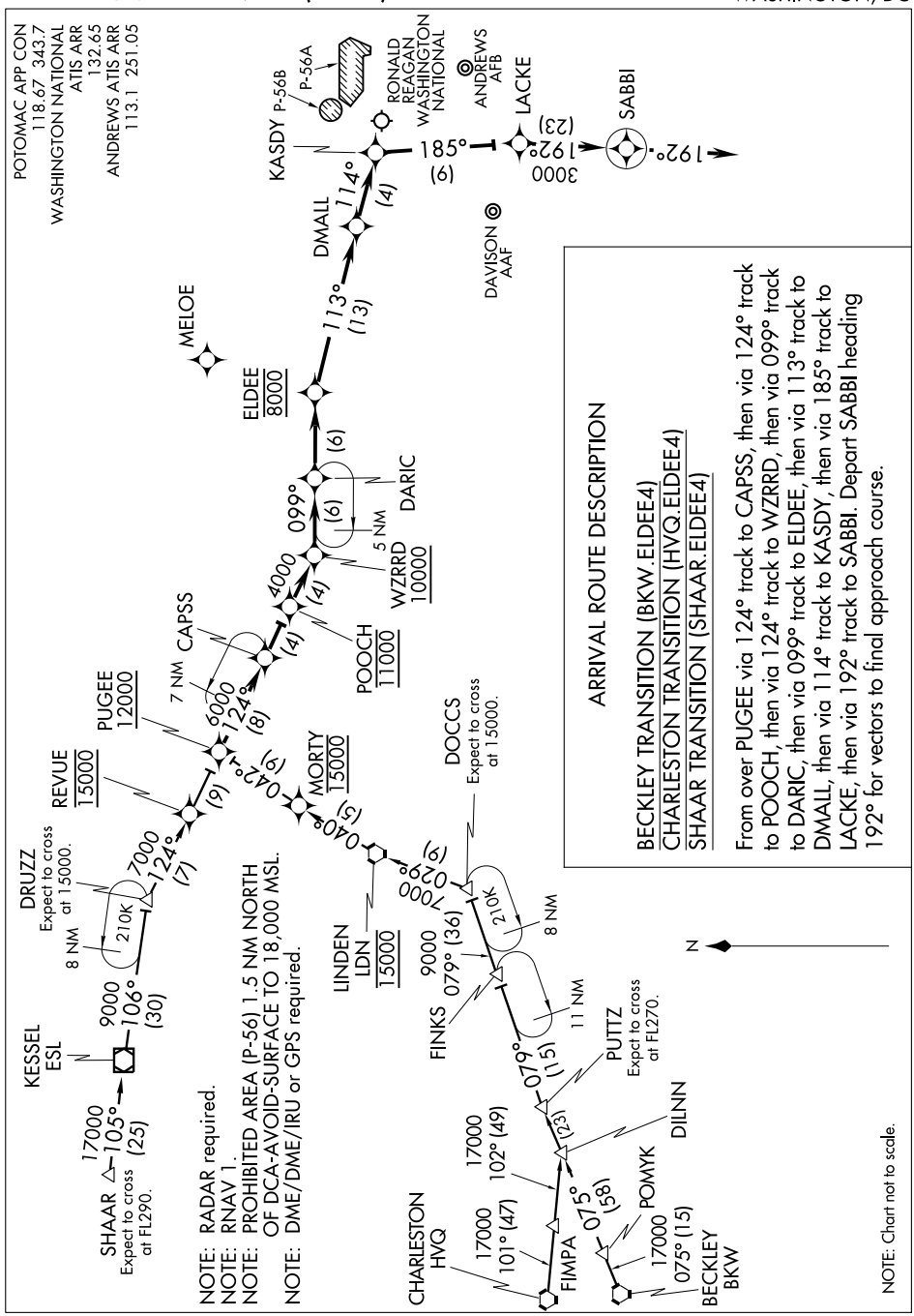
CATEGORY	A	B	C	D
S-3	1220-1 810 (900-1)	1220-1¼ 810 (900-1¼)	1220-2¼ 810 (900-2¼)	NA
CIRCLING	1220-1 803 (900-1)	1220-1¼ 803 (900-1¼)	1220-2¼ 803 (900-2¼)	NA

Knots	60	90	120	150	180
Min:Sec					

NE-3. 14 JAN 2010 to 11 FEB 2010

ELDEE FOUR ARRIVAL (RNAV)

WASHINGTON, DC



ILS or LOC RWY 32

LOC I-DAA	APCH CRS	Rwy ldg	4727
108.9	322°	TDZE	68
		Arpt Elev	73

AL-5504 [USA]

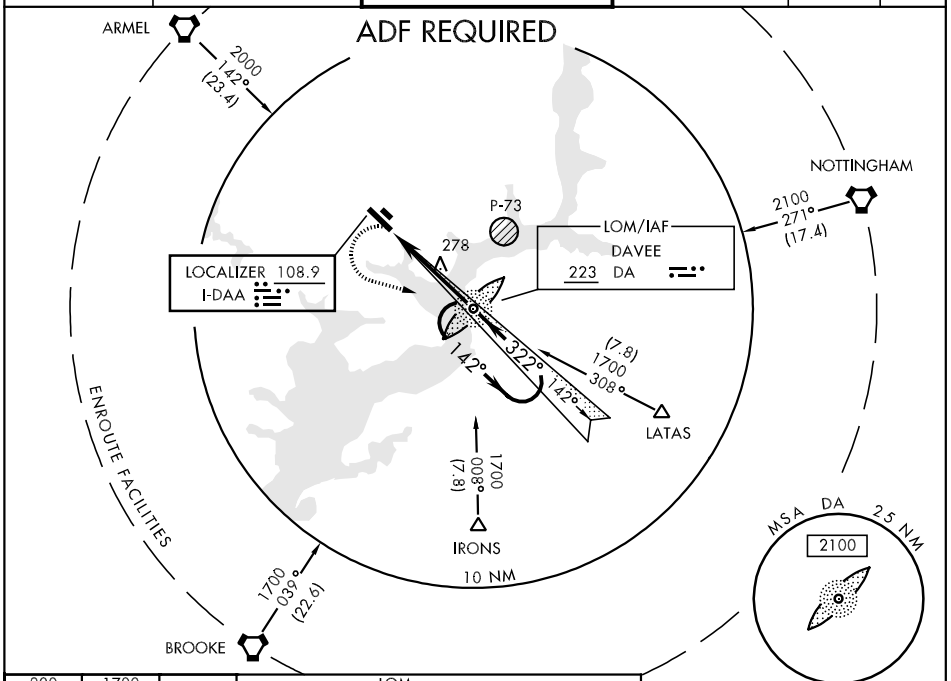
DAVISON AAF (KDAA)

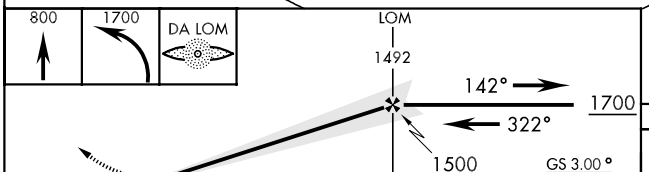
* For inoperative MALSF, increase S-LOC 32 CAT D visibility to 1½ miles.
** If local altimeter setting not received, use Washington National altimeter setting.

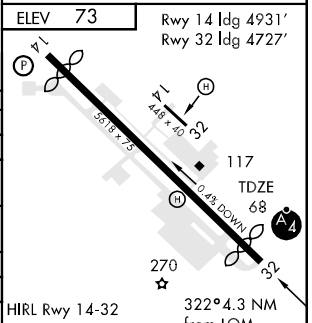
MALSF

MISSED APPROACH: Climb to 800 then climbing left turn to 1700 direct to DA LOM and hold.

ATIS	POTOMAC APP CON	DAVISON TOWER *	GND CON	CLNC DEL	PAR
128.175 230.0	119.85 322.3	126.3 (CTAF) 229.4	121.9 245.2	245.2	







CATEGORY	A	B	C	D
S-ILS 32	337/50 269 (300-1)			
S-LOC 32 *	540/40 472 (500-¾)		540/50 472 (500-1)	540/60 472 (500-1¼)
CIRCLING	740-1 667 (700-1)		740-1 ¾ 667 (700-1¾)	760-2¼ 687 (700-2¼)
S-PAR 32	333/40 265 (300-¾) GS 3.00°			
** WASHINGTON NATIONAL ALTIMETER SETTING MINIMUMS				
S-ILS 32	351/50 283 (300- 1)			
S-LOC 32 *	580/40 512 (600-¾)		580/60 512 (600-1¼)	580-1½ 512 (600-1½)
CIRCLING	780-1 707 (800-1)		780-2 707 (800-2)	800-2¼ 727 (800-2¼)

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

NE-3, 14 JAN 2010 to 11 FEB 2010

NDB RWY 32

DA LOM	APCH CRS	Rwy ldg	4727
223	323°	TDZE	68
		Arpt Elev	73

AL-5504 [USA]

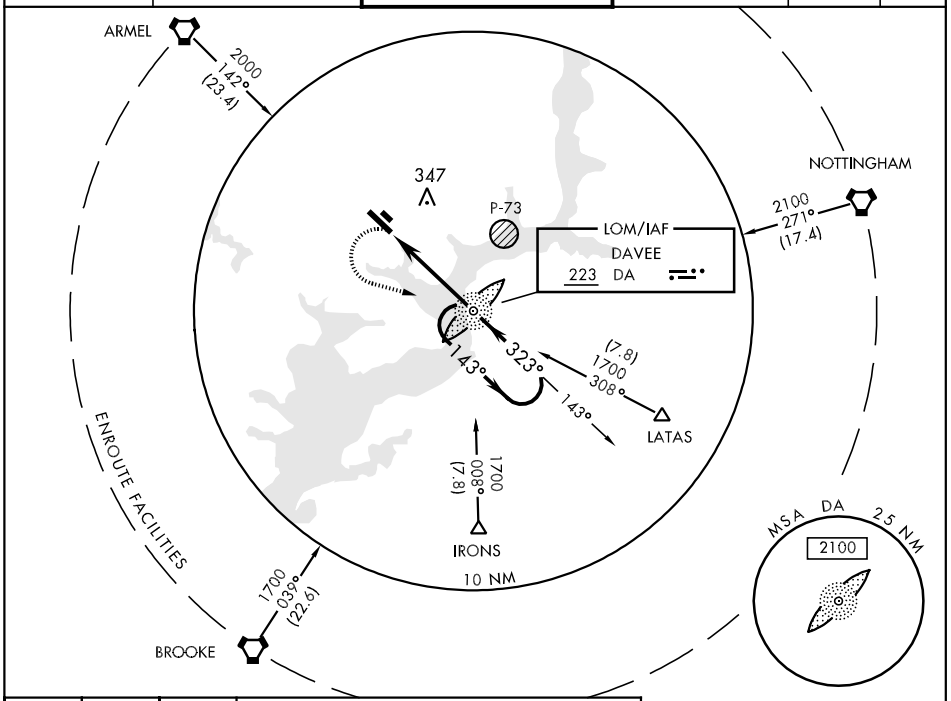
DAVISON AAF (KDAA)

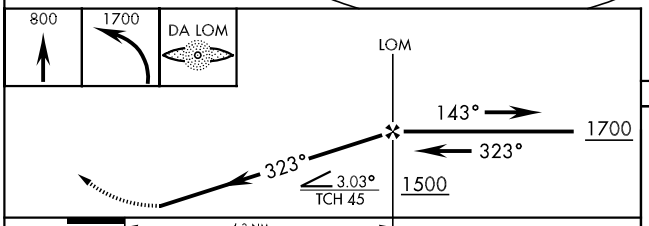
* For inop MALSF, increase S-32 CAT D vis to 2¼ miles.
** If local altimeter setting not received, use Washington National altimeter setting.

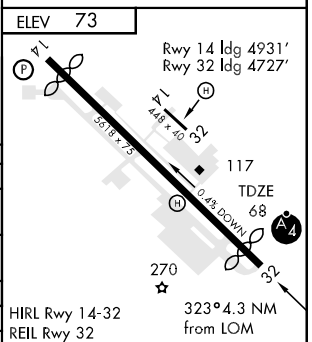
MALSF

MISSED APPROACH: Climb to 800 then climbing left turn to 1700 direct DA LOM and hold.

ATIS	POTOMAC APP CON	DAVISON TOWER *	GND CON	CLNC DEL	PAR
128.175 230.0	119.85 322.3	126.3 (CTAF) L 229.4	121.9 245.2	245.2	







CATEGORY	A	B	C	D
S-32 *	740/40 672 (700-¾)		740-1¾ 672 (700-1¾)	740-2 672 (700-2)
CIRCLING	740-1 667 (700-1)		740-1¾ 667 (700-1¾)	760-2¼ 687 (700-2¼)
S-PAR 32	333/40 265 (300-¾) GS 3.00°			
** WASHINGTON NATIONAL ALTIMETER SETTING MINIMUMS				
S-32 *	780/40 712 (800-¾)		780-1¾ 712 (800-1¾)	780-2 712 (800-2)
CIRCLING	780-1 707 (800-1)		780-2 707 (800-2)	800-2¼ 727 (800-2¼)

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

RNAV (GPS) RWY 14

APCH CRS	Rwy ldg	4931
142°	TDZE	60
	Arpt Elev	73

AL-5504 [USA]

DAVISON AAF (KDAA)

* If local altimeter setting not received, use Washington National altimeter setting.

N/A

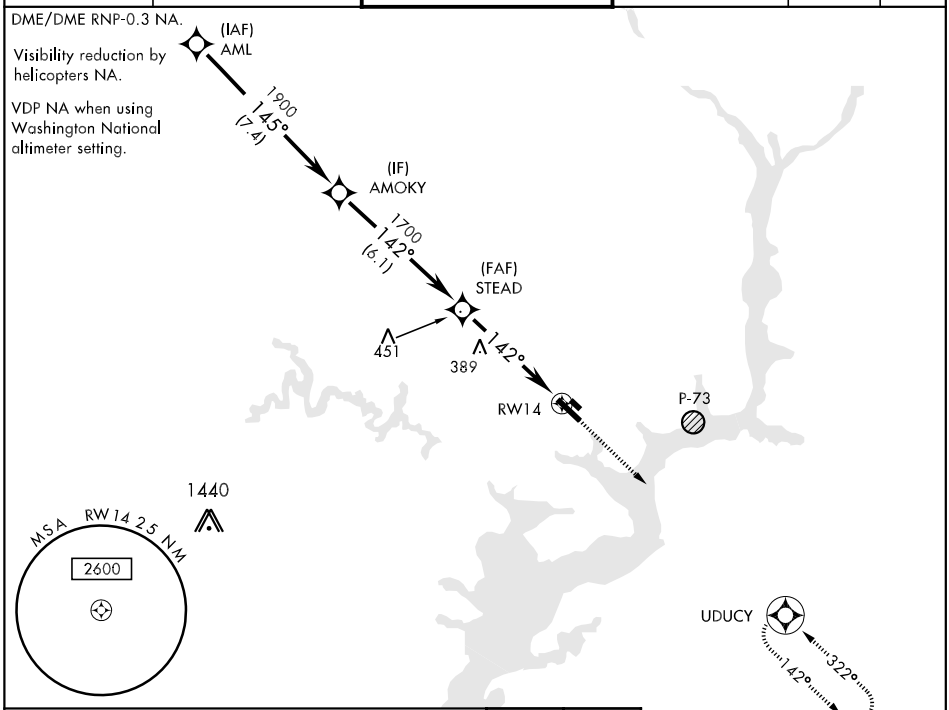
MISSED APPROACH: Climb to 2000 direct UDUCY and hold.

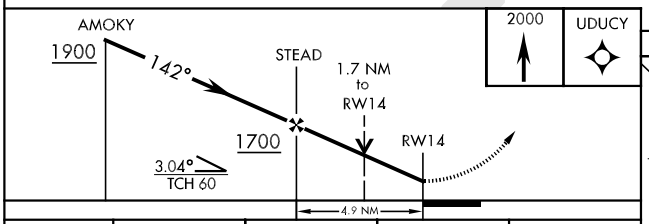
ATIS	POTOMAC APP CON	DAVISON TOWER *	GND CON	CLNC DEL	PAR
128.175 230.0	119.85 322.3	126.3 (CTAF) L 229.4	121.9 245.2	245.2	

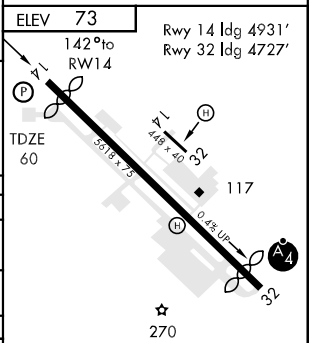
DME/DME RNP-0.3 NA.

Visibility reduction by helicopters NA.

VDP NA when using Washington National altimeter setting.







CATEGORY	A	B	C	D
LNAV MDA	660-1 600 (600-1)		660-1½ 600 (600-1½)	660-1¾ 600 (600-1¾)
CIRCLING	740-1 667 (700-1)		740-1¾ 667 (700-1¾)	760-2¼ 687 (700-2¼)
S-PAR 14	635-2 575 (600-2) GS 3.00°			
* WASHINGTON NATIONAL ALTIMETER SETTING MINIMUMS				
LNAV MDA	680-1 620 (700-1)		680-1¾ 620 (700-1¾)	680-2 620 (700-2)
CIRCLING	780-1 707 (800-1)		780-2 707 (800-2)	800-2¼ 727 (800-2¼)

HIRL Rwy 14-32
REIL Rwy 32

RNAV (GPS) RWY 32

APCH CRS	Rwy ldg	4727
323°	TDZE	68
	Arpt Elev	73

AL-5504 [USA]

DAVISON AAF (KDAA)

* For inop MALSF, increase CAT D vis to 1½ miles.
** If local altimeter setting not received, use Washington National altimeter setting.

MALSF

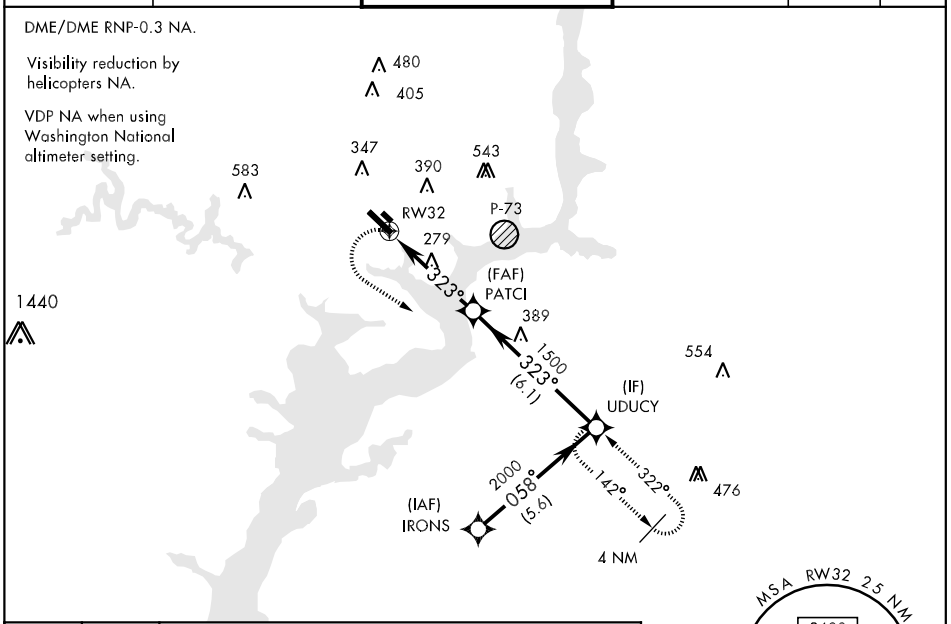
MISSED APPROACH: Climbing left turn to 2000 direct UDUCY and hold.

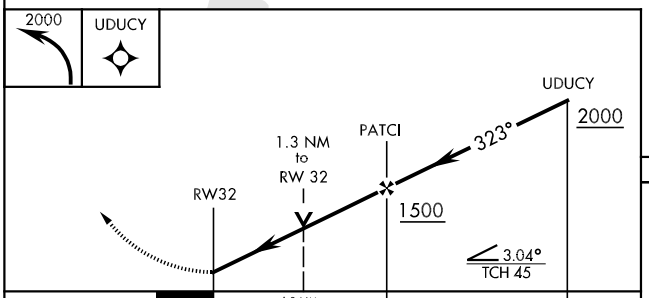
ATIS	POTOMAC APP CON	DAVISON TOWER *	GND CON	CLNC DEL	PAR
128.175 230.0	119.85 322.3	126.3 (CTAF) L 229.4	121.9 245.2	245.2	

DME/DME RNP-0.3 NA.

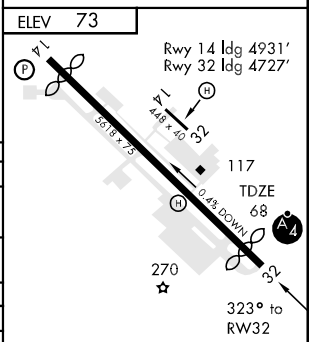
Visibility reduction by helicopters NA.

VDP NA when using Washington National altimeter setting.





CATEGORY	A	B	C	D
LNAV MDA *	540/40 472 (500-¾)		540/50 472 (500-1)	540/60 472 (500-1¼)
CIRCLING	740-1 667 (700-1)		740-1¾ 667 (700-1¾)	760-2¼ 687 (700-2¼)
S-PAR 32 *	333/40 265 (300-¾) GS 3.00°			
** WASHINGTON NATIONAL ALTIMETER SETTING MINIMUMS				
LNAV MDA *	580/40 512 (600-¾)		580/60 512 (600-1¼)	580-1½ 512 (600-1½)
CIRCLING	780-1 707 (800-1)		780-2 707 (800-2)	800-2¼ 727 (800-2¼)

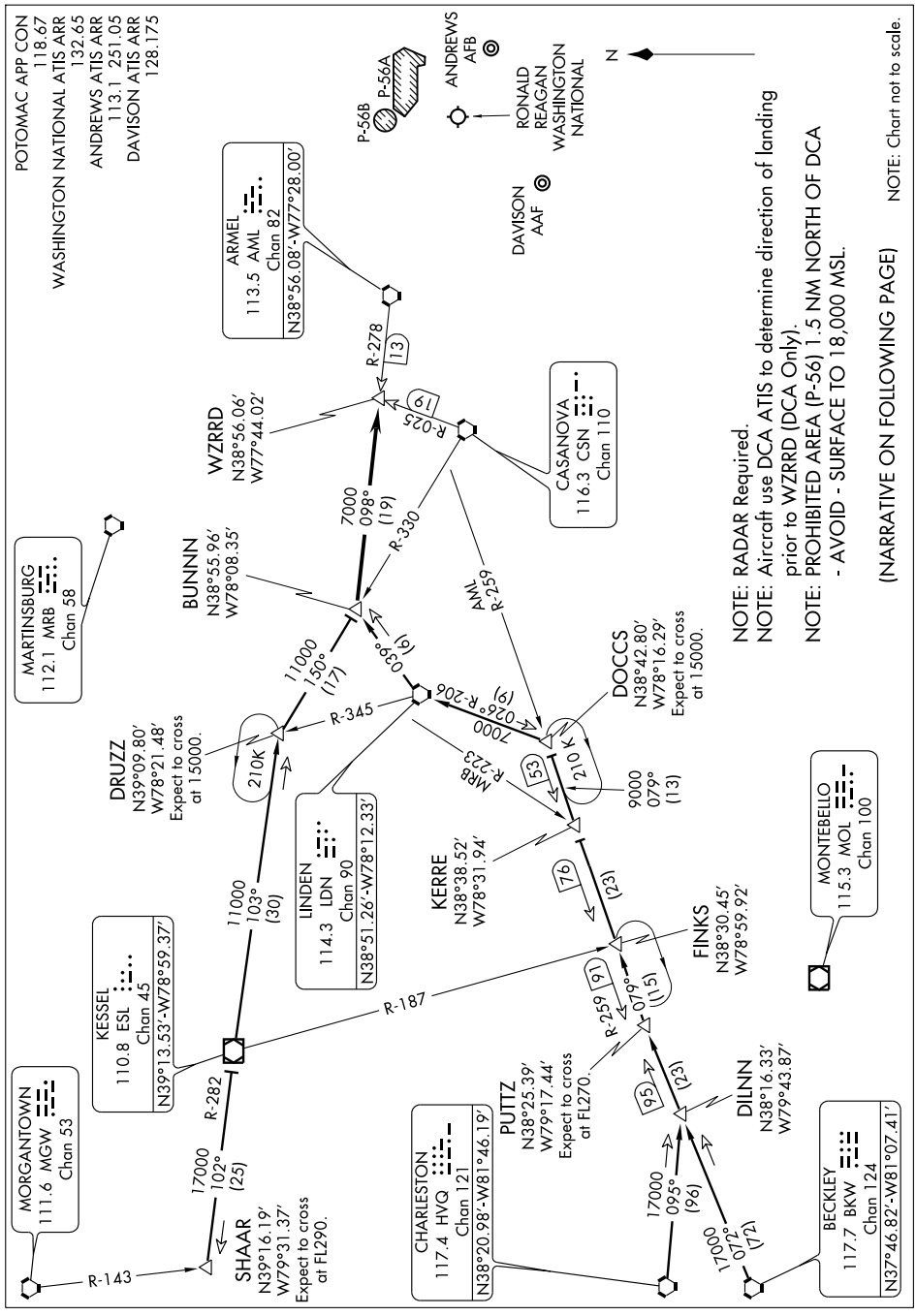


HIRL Rwy 14-32
REIL Rwy 32

NE-3, 14 JAN 2010 to 11 FEB 2010

WZRRD TWO ARRIVAL

WASHINGTON, DC



WZRRD TWO ARRIVAL

WASHINGTON, DC

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.WZRRD2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence . . . .

CHARLESTON TRANSITION (HVQ.WZRRD2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence . . . .

SHAAR TRANSITION (SHAAR.WZRRD2): From over SHAAR INT via ESL R-282 to ESL VOR/DME, then via R-103 to DRUZZ INT, then via CSN R-330 to BUNNN, thence . . . .

. . . . from over BUNNN INT via AML R-278 to WZRRD INT. Expect vectors to final approach course after WZRRD INT.

NE-3, 14 JAN 2010 to 11 FEB 2010

COPTER NDB RWY 14

NDB FAF	APCH CRS	Rwy ldg / TDZE / Arpt Elev
226	139°	3020 / 11 / 11

AL-5211 [USA]

FELKER AAF (KFAF)

When local altimeter setting not received, use Newport News/ Williamsburg Intl altimeter setting and increase all MDAs 20 FT.

ODALS

MISSED APPROACH: Climbing left turn to 1600 in FAF NDB holding pattern.

NORFOLK APP CON	FELKER TOWER ★	GND CON
125.7 335.625	126.3 (CTAF) L 269.25	121.35 229.4

NOT FOR CIVIL USE

HOPEWELL 112.0 HPW Chan 57

HARCUM 108.8 HCM Chan 25

2000 174° (19.1)

319°

184°

004°

2000 121° (26.4)

Limit final and missed approach airspeed to 90 KIAS.

139°

319°

139°

366

230

IAF FELKER 226 FAF

334

2000 046° (31.7)

5 NM

MSA FAF 25 NM

1600

270°

090°

2300

FRANKLIN 110.6 FKN Chan 43

ENROUTE FACILITIES

ELEV 11

139° 0.4 NM from NDB

H

V2

TDZE 11

3020 × 75

TWR 122

133

V2

32

HIRL Rwy 14-32 L

Remain within 5 NM

NDB

319°

1600

139°

1600

FAF

CATEGORY	COPTER
H-14	540-¾ 529 (600-¾)

COPTER RNAV (GPS) RWY 14

APCH CRS	Rwy ldg	3020
139°	TDZE	11
	Arpt Elev	11

AL-5211 [USA]

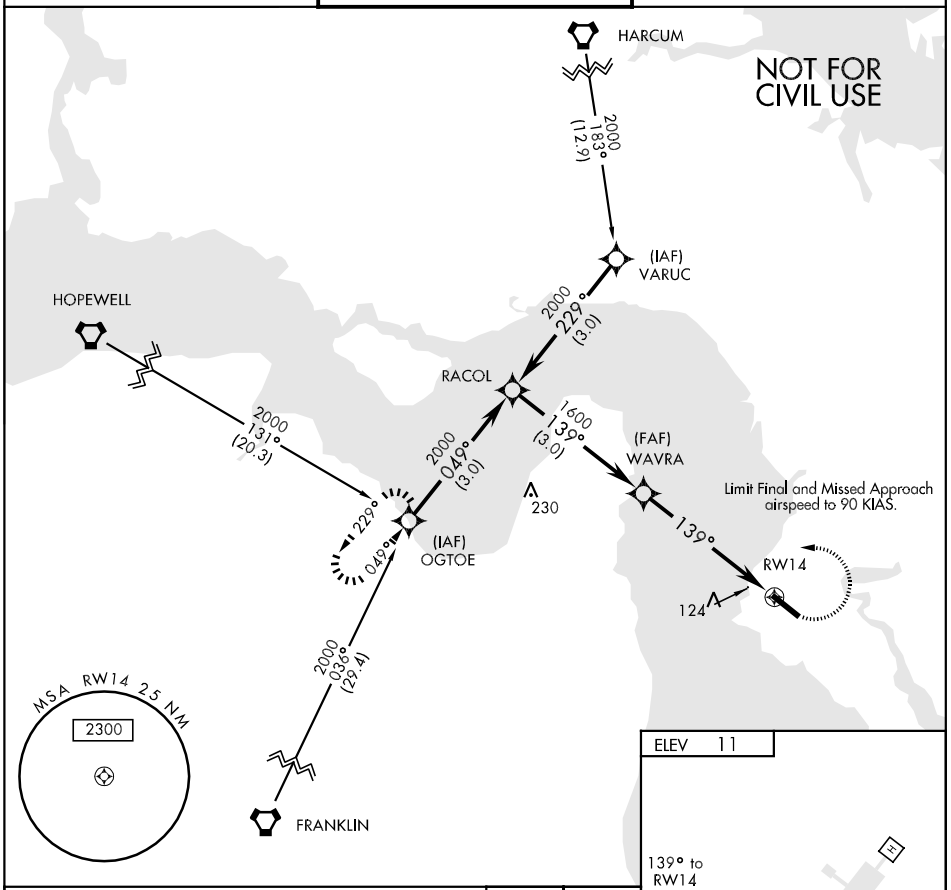
FELKER AAF (KFAF)

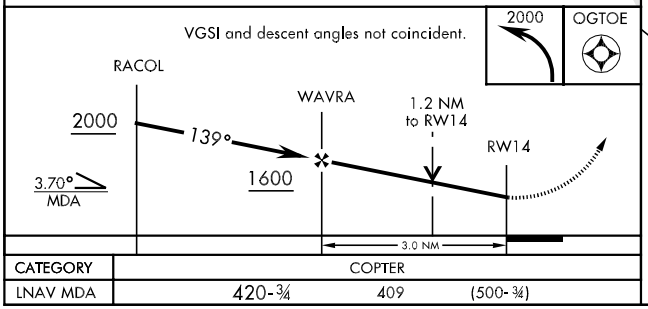
When local altimeter setting not received, use Newport News/Williamsburg Intl altemeter setting and increase MDA 20 feet. VDP NA when using Newport News/Williamsburg Intl altimeter setting. DME/DME RNP-0.3 NA

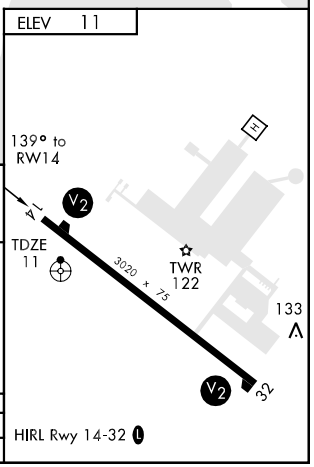
ODALS

MISSED APPROACH: Climbing left turn to 2000 direct OGTOE and hold.

NORFOLK APP CON	FELKER TOWER ★	GND CON
125.7 335.625	126.3 (CTAF) L 269.25	121.35 229.4



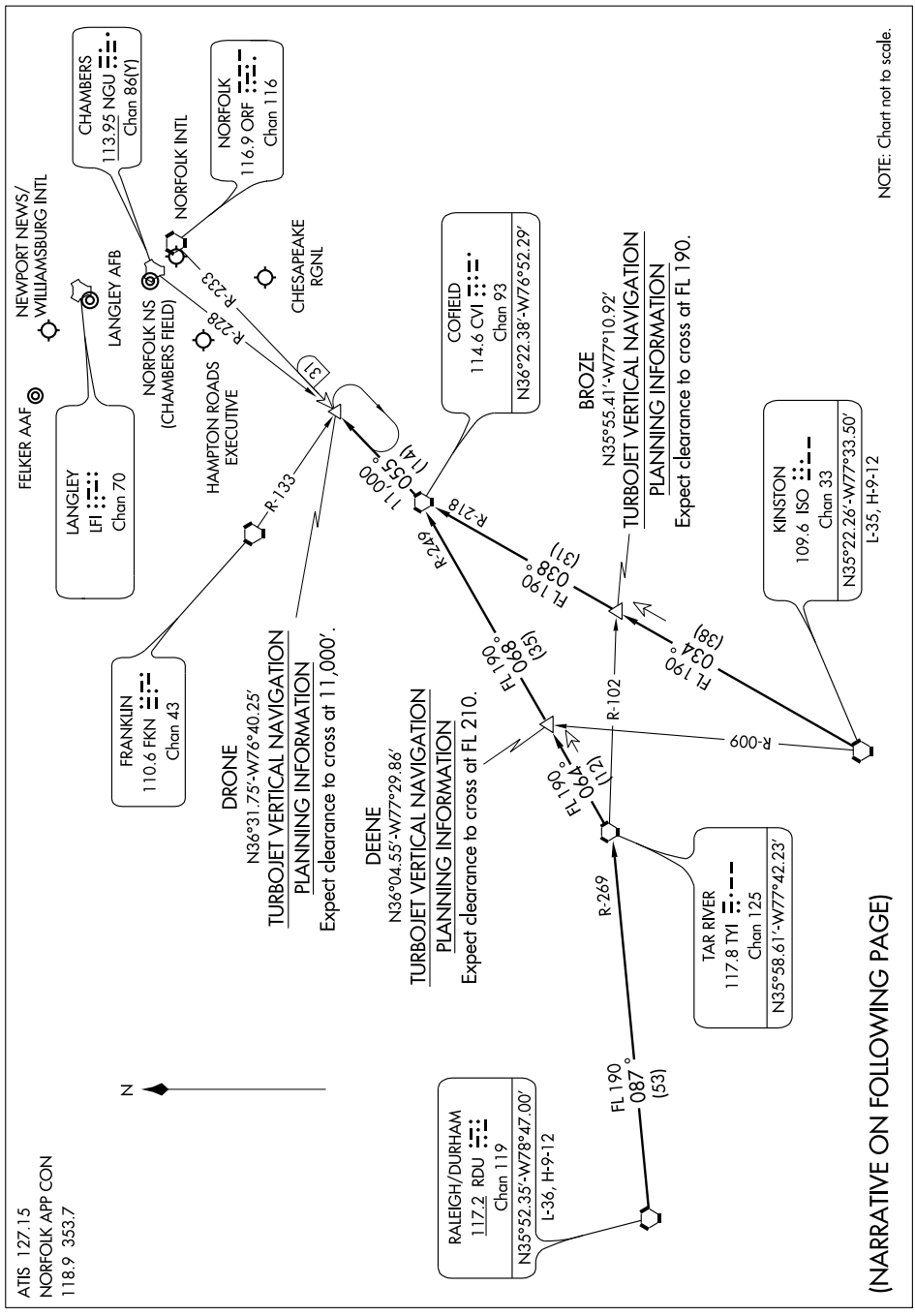




CATEGORY	COPTER		
LNAV MDA	420-¾	409	(500-¾)

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

NDB RWY 14

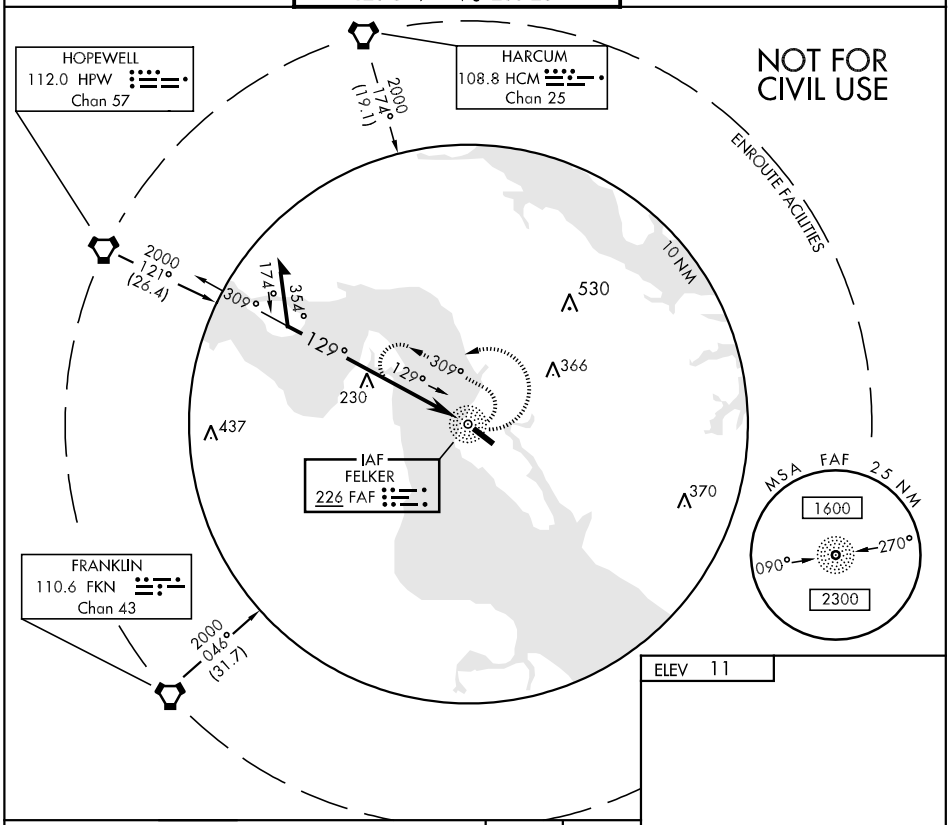
NDB FAF	APCH CRS	Rwy ldg / TDZE / Arpt Elev	AL-5211 [USA]	FELKER AAF (KFAF)
226	129°	3020 / 11 / 11		

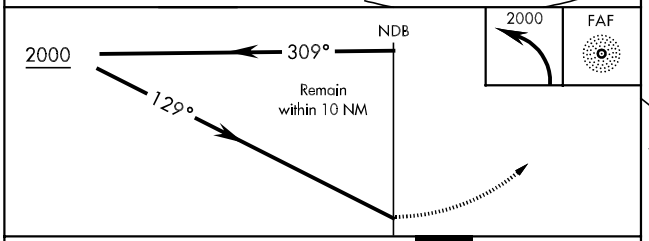
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Newport News/ Williamsburg Intl altimeter setting and increase all MDAs 20 FT.

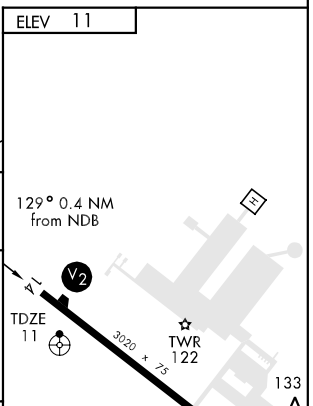
ODALS

MISSED APPROACH: Climbing left turn to 2000 in FAF NDB holding pattern.

NORFOLK APP CON	FELKER TOWER ★	GND CON
125.7 335.625	126.3 (CTAF) L 269.25	121.35 229.4







CATEGORY	A	B	C	D
S-14	540-¾ 529 (600-¾)		NA	
CIRCLING	540-1 529 (600-1)			

RNAV (GPS) RWY 14

APCH CRS	Rwy ldg	3020
139°	TDZE	11
	Arpt Elev	11

AL-5211 [USA]

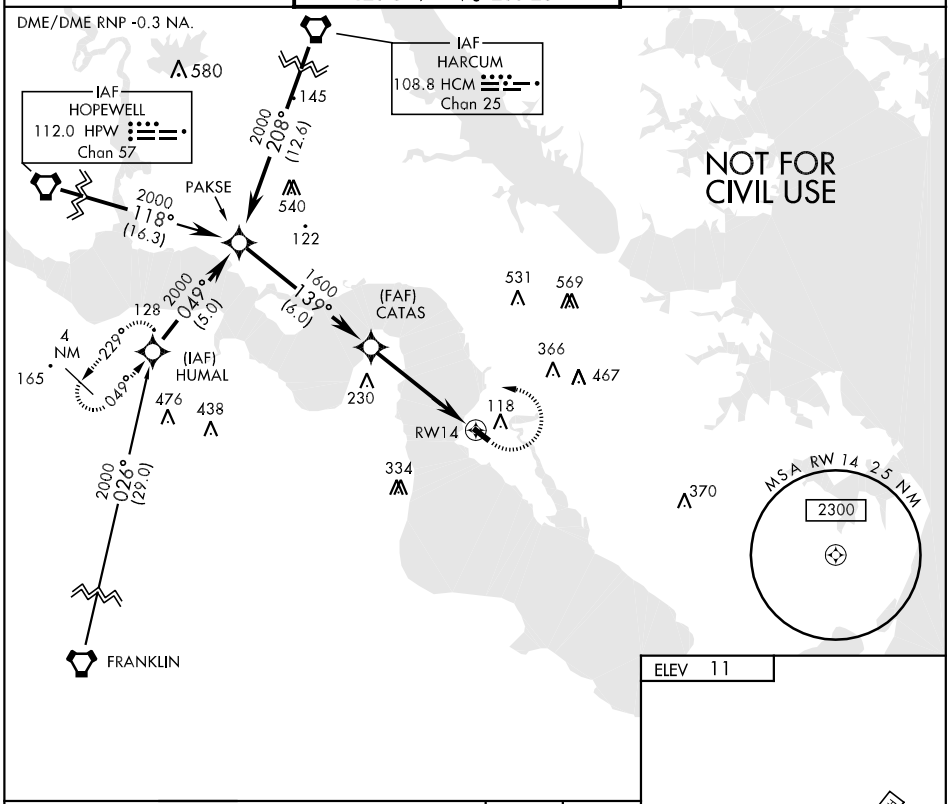
FELKER AAF (KFAF)

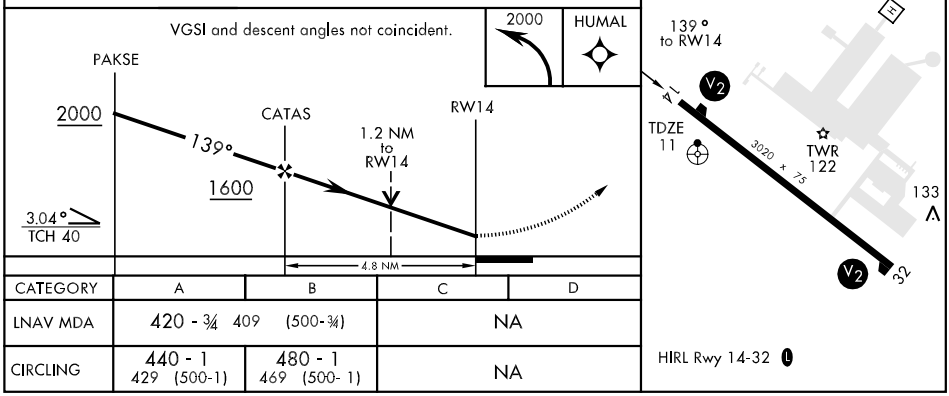
When local altimeter setting not received, use Newport News/Williamsburg Intl altimeter setting and increase all MDAs 20 FT. VDP NA when using Newport News/Williamsburg Intl for altimeter setting. Visibility reduction by helicopters NA.

ODALS

MISSED APPROACH: Climbing left turn to 2000 direct HUMAL and hold.

NORFOLK APP CON	FELKER TOWER ★	GND CON
125.7 335.625	126.3 (CTAF) 269.25	121.35 229.4





CATEGORY	A	B	C	D
LNAV MDA	420 - ¾ 409 (500-¾)		NA	
CIRCLING	440 - 1 429 (500-1)	480 - 1 469 (500- 1)	NA	

VORTAC HPW 112.0 Chan 57	APCH CRS 262°	Rwy ldg N/A TDZE N/A Arpt Elev 100

AL-2437 [USA]

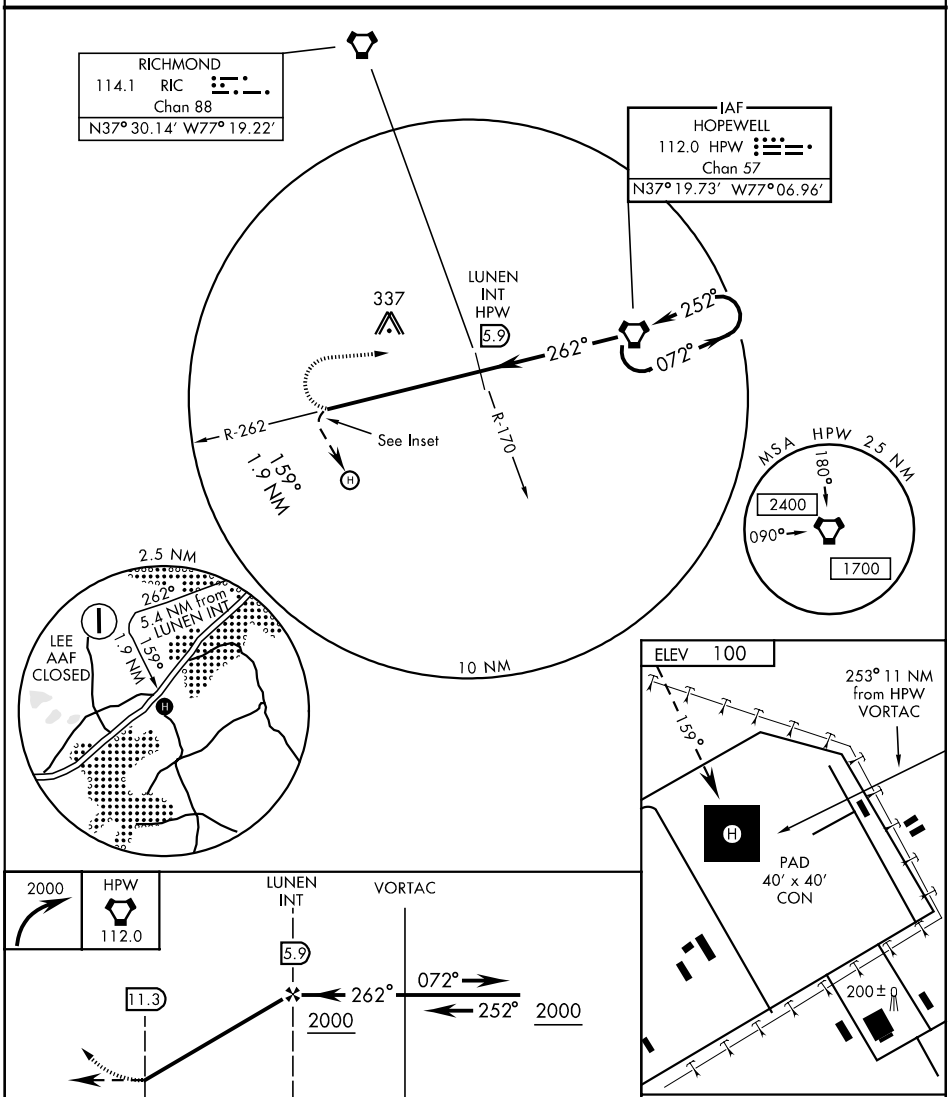
COPTER VOR 262°

FORT LEE HELIPAD NR. 3, VA (VA39)

NA Use Richmond altimeter setting.
Procedure not authorized at night.
Activate Helipad lights and make advsy on 126.2.
Proceed visually from MAP to landing area or conduct the specified missed approach.

MISSED APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

RICHMOND APP CON
126.4 319.8



CATEGORY	COPTER
H- 262°	680- ¾ 560 (600- ¾)

FAF to MAP 5.4 NM					
Knots	45	60	75	90	105
Min:Sec	7:12	5:24	4:19	3:36	3:05

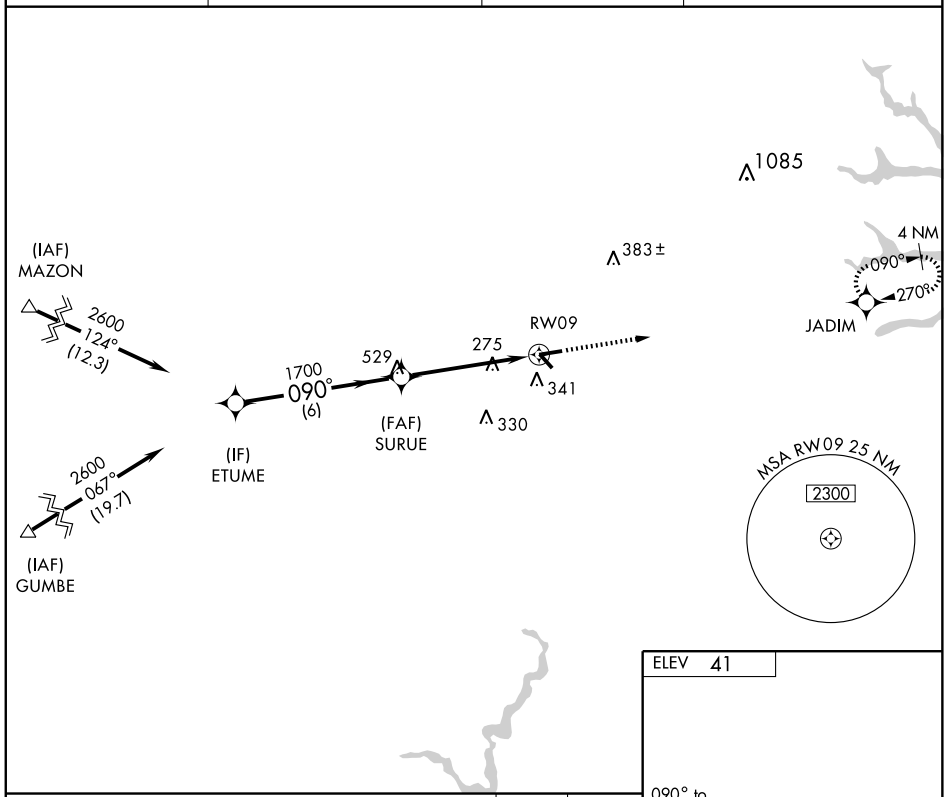
APP CRS	Rwy ldg	4977
090°	TDZE	35
	Apt Elev	41

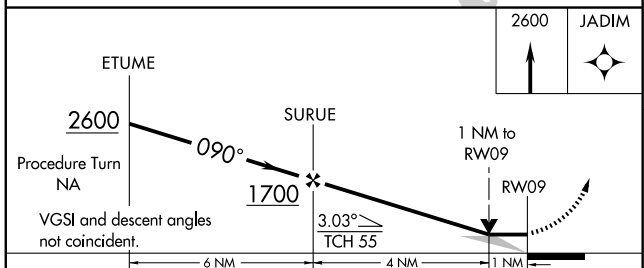
RNAV (GPS) RWY 9
FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

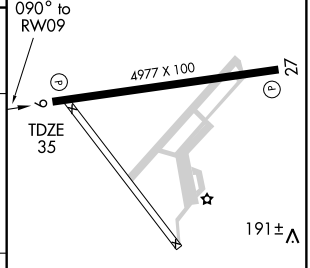
GPS or RNP-0.3 required.
NA DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600 direct JADIM WP and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
124.675	127.9 269.42	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	580 - 1 545 (600-1)		580 - 1½ 545 (600-1½)	580 - 1¾ 545 (600-1¾)
CIRCLING	700 - 1 659 (700-1)		700 - 1¾ 659 (700-1¾)	700 - 2 659 (700-2)

MIRL Rwy 9-27 L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4977
270°	TDZE	41
	Apt Elev	41

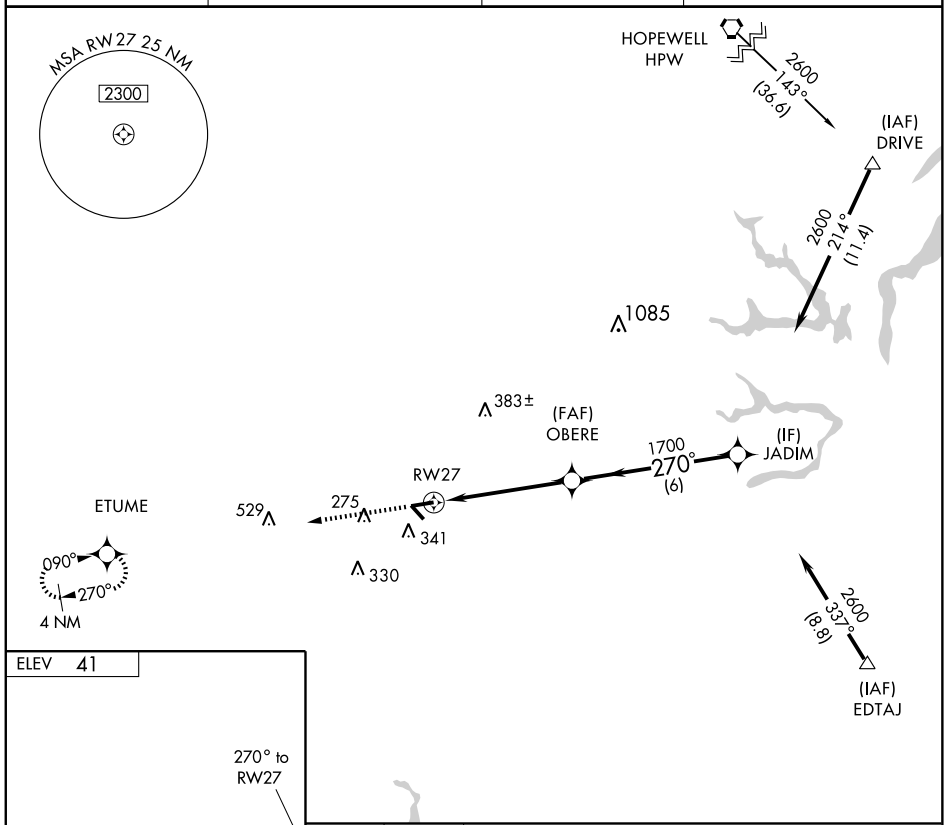
RNAV (GPS) RWY 27
FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

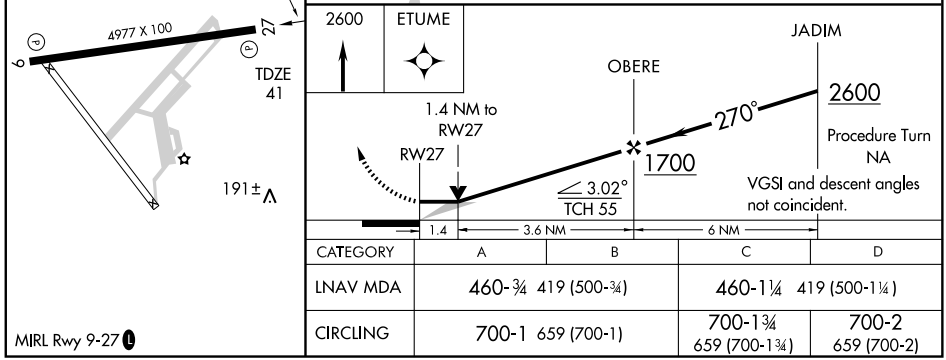
Inoperative table does not apply to LNAV Cat. C.
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climb to 2600 direct ETUME WP and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
124.675	127.9 269.42	135.075	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	460-¾ 419 (500-¾)		460-1¼ 419 (500-1¼)	
CIRCLING	700-1 659 (700-1)		700-1¾ 659 (700-1¾)	700-2 659 (700-2)

MIRL Rwy 9-27 L

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC FKN	APP CRS	Rwy ldg	4977
110.6	285°	TDZE	41
Chan 43		Apt Elev	41

VOR/DME RWY 27

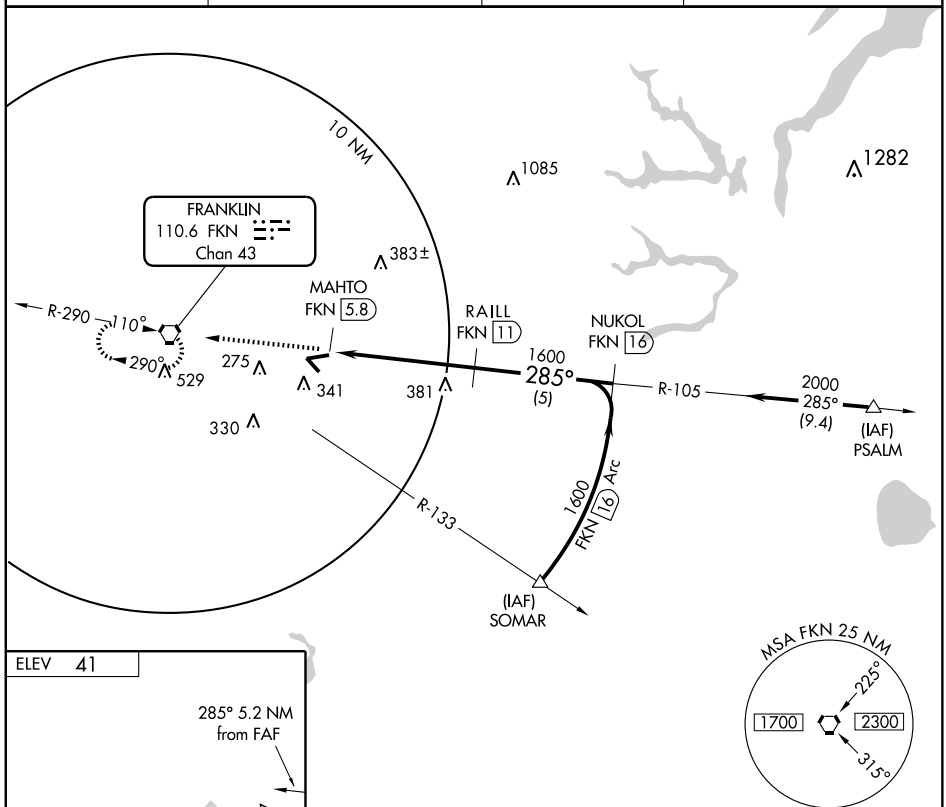
FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

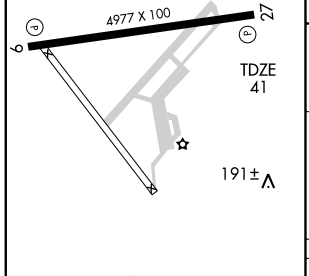
Inoperative table does not apply to CAT C.

NA

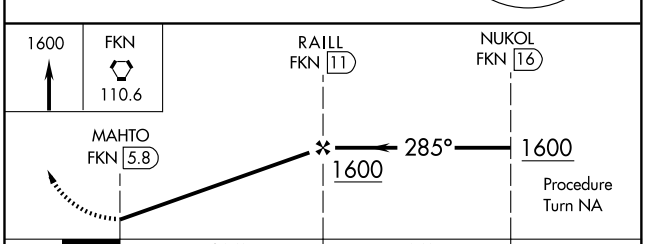
MISSED APPROACH: Climb to 1600 direct to FKN VORTAC and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
124.675	127.9 269.42	135.075	122.8 (CTAF) L





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-27	640-¾ 599 (600-¾)		640-1½ 599 (600-1½)	640-1¾ 599 (600-1¾)
CIRCLING	700-1 659 (700-1)		700-1¾ 659 (700-1¾)	700-2 659 (700-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

VORTAC FKN 110.6 Chan 43	APP CRS 110°	Rwy ldg 4977 TDZE 35 Apt Elev 41

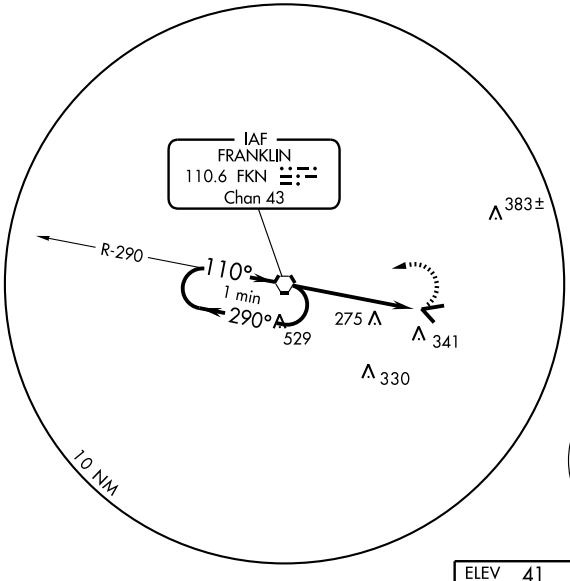
VOR RWY 9

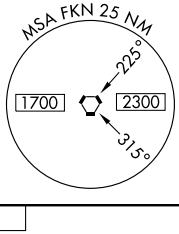
FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

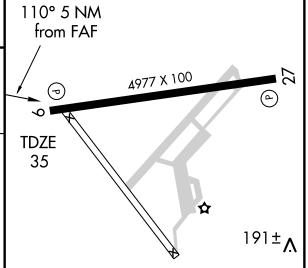
NA

MISSED APPROACH: Climbing left turn to 1600 direct FKN VORTAC and hold.

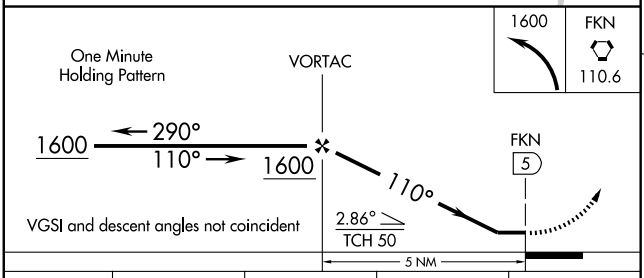
AWOS-3	NORFOLK APP CON	GCO	UNICOM
124.675	127.9 269.42	135.075	122.8 (CTAF)







MIRL Rwy 9-27



CATEGORY	A	B	C	D
S-9	580-1	545 (600-1)	580-1½ 545 (600-1½)	580-1¾ 545 (600-1¾)
CIRCLING	700-1	659 (700-1)	700-1¾ 659 (700-1¾)	700-2 659 (700-2)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	2964
235°	TDZE	85
	Apt Elev	85

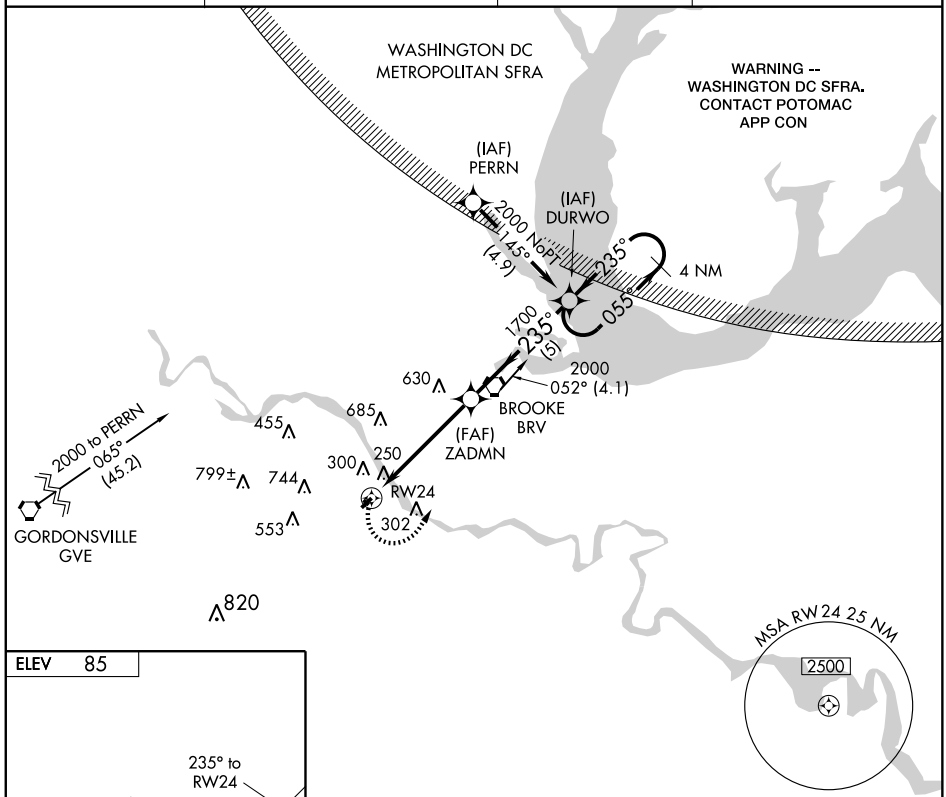
GPS RWY 24
FREDERICKSBURG / SHANNON (EZF)

Visibility reduction by helicopters NA.

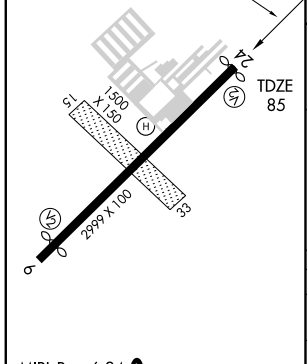
NA

MISSED APPROACH: Climbing left turn to 2000 direct DURWO WP and hold.

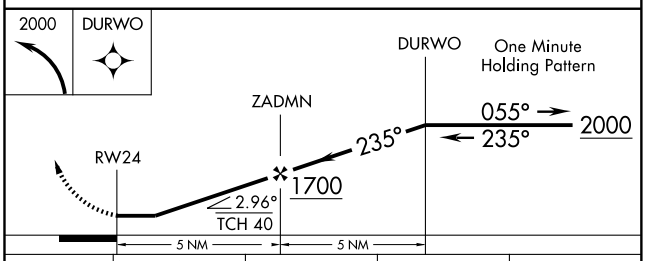
AWOS-3	POTOMAC APP CON	GCO	UNICOM
128.125	124.65 306.925	135.075	122.8 (CTAF) L



ELEV 85



MIRL Rwy 6-24 L



CATEGORY	A	B	C	D
S-24	600-1 515 (600-1)		600-1½ 515 (600-1½)	NA
CIRCLING	640-1 555 (600-1)	660-1 575 (600-1)	660-1½ 575 (600-1½)	NA

NDB EZF	APP CRS	Rwy ldg	2964
237	237°	TDZE	85
		Apt Elev	85

NDB RWY 24

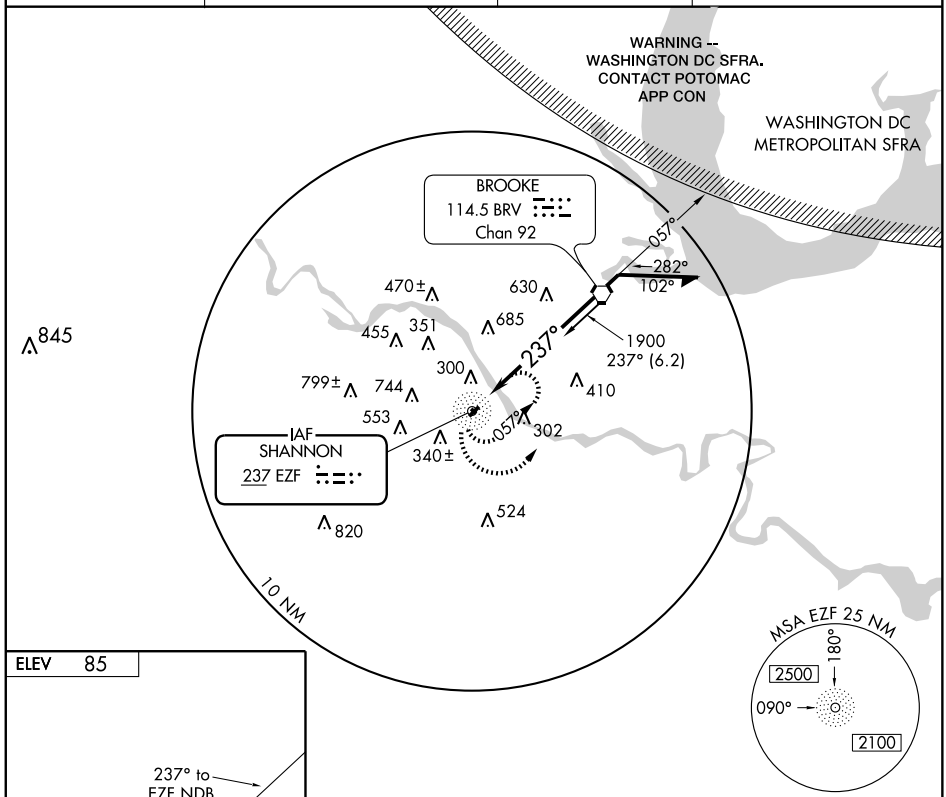
FREDERICKSBURG / SHANNON (EZF)

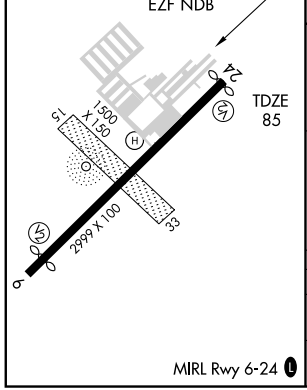
Visibility reduction by helicopters NA.

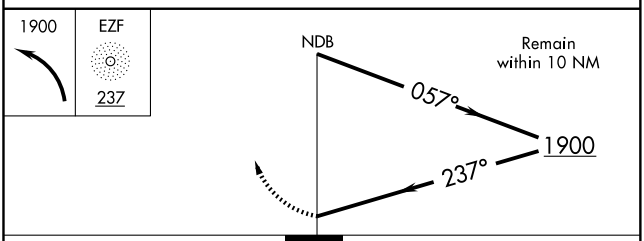
NA

MISSED APPROACH: Climbing left turn to 1900 in EZF NDB holding pattern.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
128.125	124.65 306.925	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-24	1100-1¼ 1015 (1100-1¼)	1100-1½ 1015 (1100-1½)	1100-3 1015 (1100-3)	NA
CIRCLING	1100-1¼ 1015 (1100-1¼)	1100-1½ 1015 (1100-1½)	1100-3 1015 (1100-3)	NA

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	N/A
260°	TDZE	N/A
	Apt Elev	704

RNAV (GPS) -A

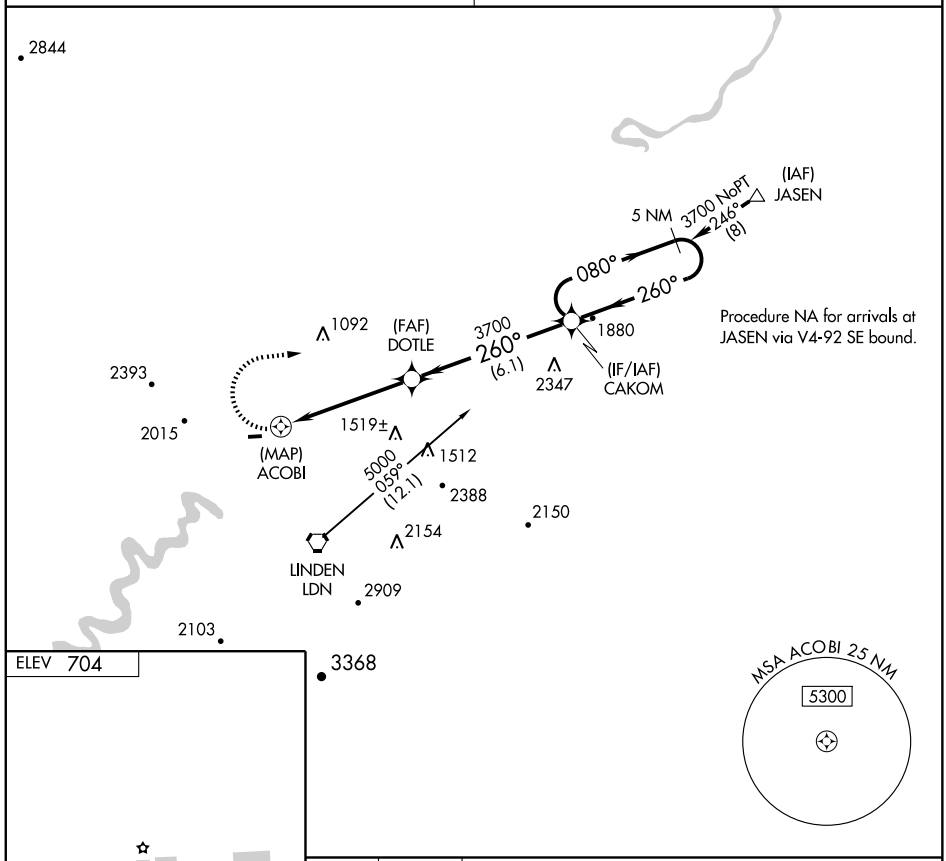
FRONT ROYAL-WARREN COUNTY (FRR)

Use Winchester Rgnl altimeter setting; If not received use Eastern WV Rgnl/Shepherd Field altimeter setting and increase all MDAs 60 feet. Procedure NA at night. DME/DME RNP-0.3 NA.

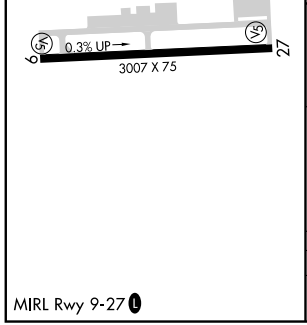
NA

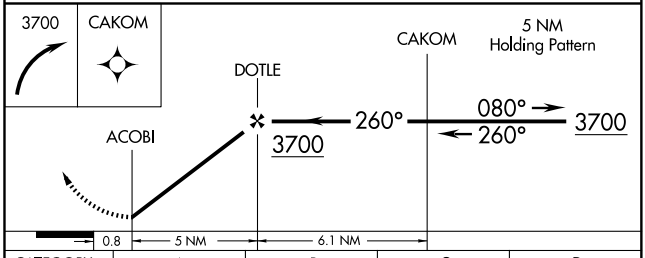
MISSED APPROACH: Climbing right turn to 3700 direct CAKOM and hold.

POTOMAC APP CON	UNICOM
120.45	123.0 (CTAF) L



ELEV 704





CATEGORY	A	B	C	D
CIRCLING	1820-1¼ 1116 (1200-1¼)	1820-1½ 1116 (1200-1½)	NA	

MIRL Rwy 9-27 L

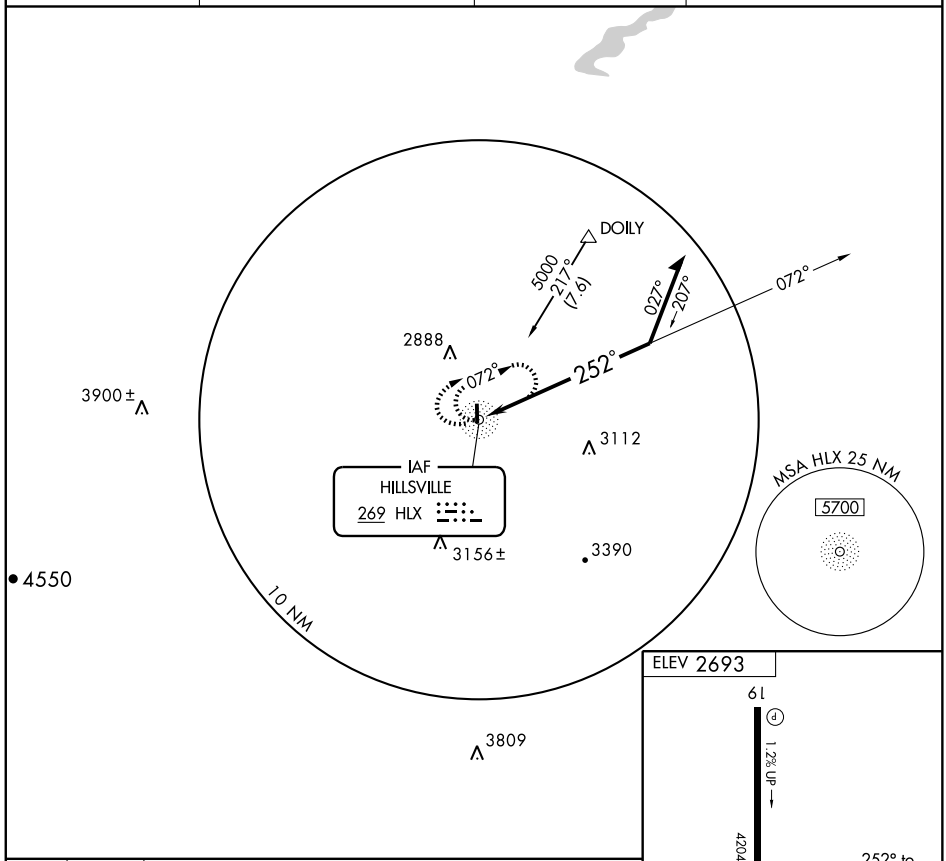
NDB HLX 269	APP CRS 252°	Rwy ldg N/A TDZE N/A Apt Elev 2693

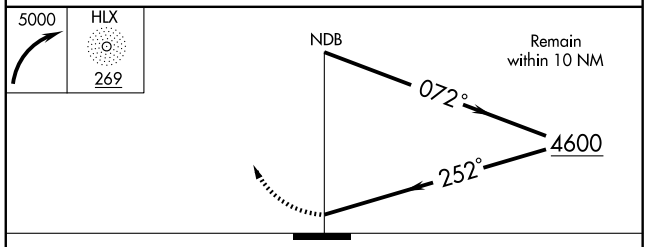
NDB-A
GALAX / TWIN COUNTY (HLX)

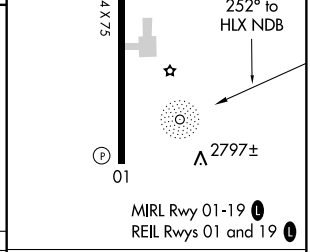
NA

MISSED APPROACH: Climbing right turn to 5000 in HLX NDB holding pattern.

AWOS-3	ROANOKE APP CON	GCO	UNICOM
118.375	126.0 339.8	135.075	122.8 (CTAF) L







MIRL Rwy 01-19 L
REIL Rwys 01 and 19 L

CATEGORY	A	B	C	D
CIRCLING	3480-1 787 (800-1)	3480-1¼ 787 (800-1¼)	3480-2¼ 787 (800-2¼)	3480-2½ 787 (800-2½)

Knots	60	90	120	150	180
Min:Sec					

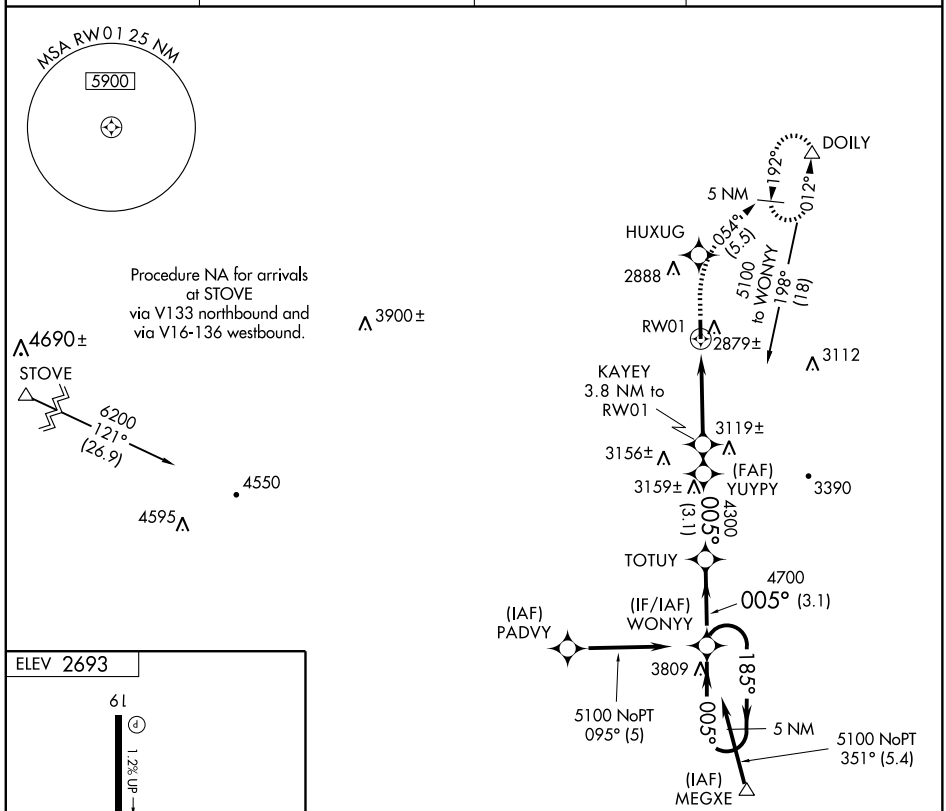
APP CRS	Rwy ldg	4204
005°	TDZE	2693
	Apt Elev	2693

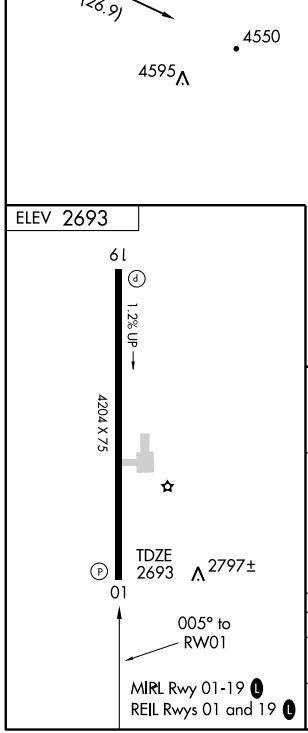
RNAV (GPS) RWY 1
GALAX / TWIN COUNTY (HLX)

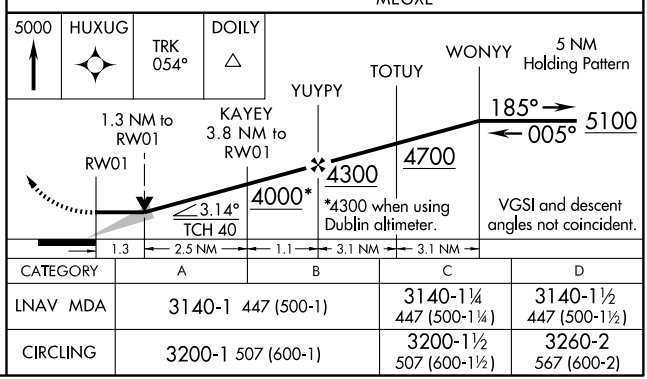
If local altimeter setting not received, use Dublin altimeter setting and increase all MDAs 300 feet. VDP and straight-in minimums NA when using Dublin altimeter setting. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 5000 direct HUXUG and via 054° track to DOILY and hold, continue climb-in-hold to 5000.

AWOS-3	ROANOKE APP CON	GCO	UNICOM
118.375	126.0 339.8	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3140-1 447 (500-1)		3140-1¼ 447 (500-1¼)	3140-1½ 447 (500-1½)
CIRCLING	3200-1 507 (600-1)		3200-1½ 507 (600-1½)	3260-2 567 (600-2)

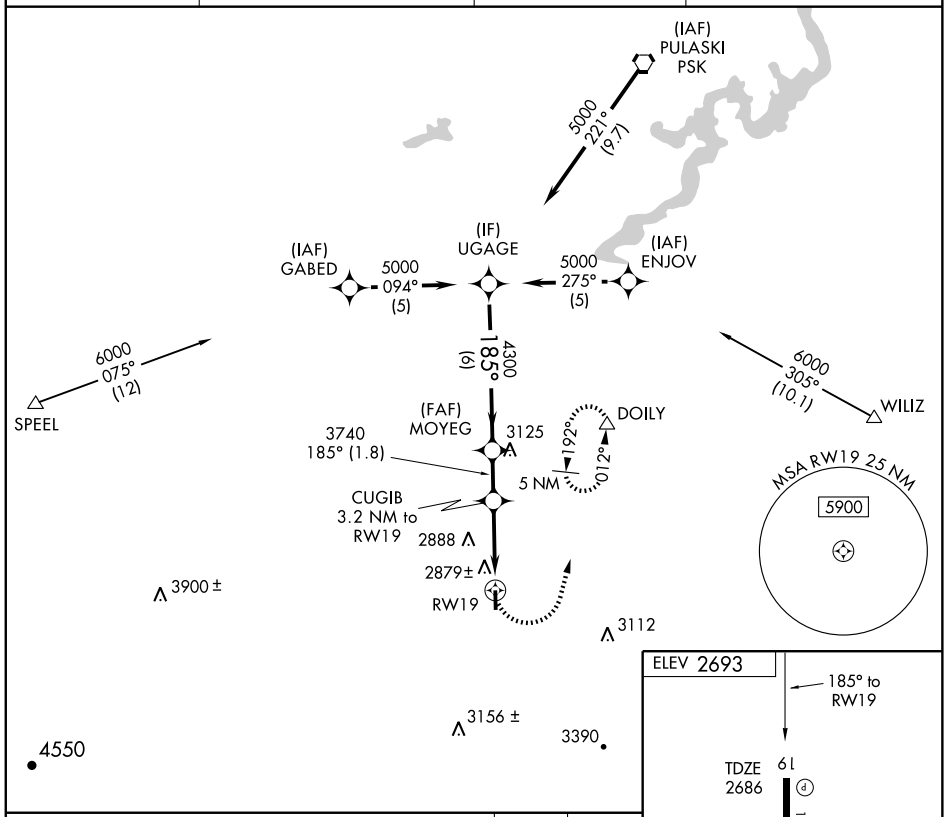
APP CRS	Rwy ldg	4204
185°	TDZE	2686
	Apt Elev	2693

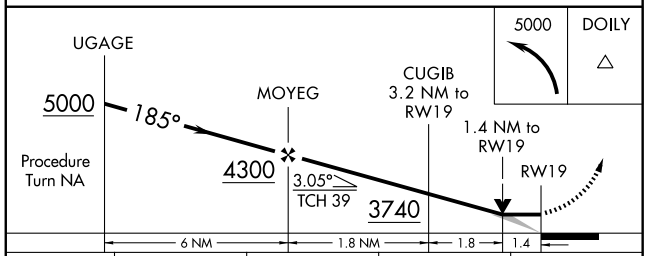
RNAV (GPS) RWY 19
GALAX / TWIN COUNTY (HLX)

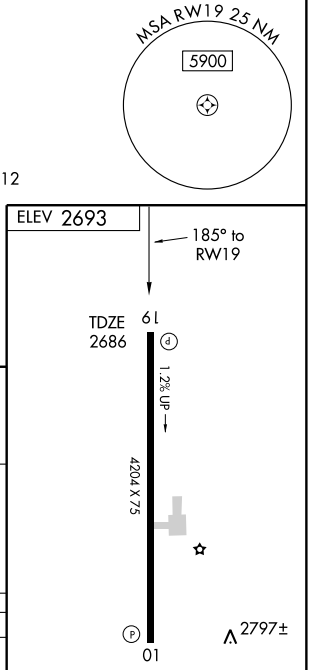
If local altimeter setting not received, use Dublin altimeter setting and increase all MDAs 300 feet. VDP NA when using Dublin altimeter setting. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 5000 direct DOILY and hold.

AWOS-3	ROANOKE APP CON	GCO	UNICOM
118.375	126.0 339.8	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3140-1 454 (500-1)		3140-1¼ 454 (500-1¼)	3140-1½ 454 (500-1½)
CIRCLING	3200-1 507 (600-1)		3200-1½ 507 (600-1½)	3260-2 567 (600-2)

MIRL Rwy 01-19 L
REIL Rwys 01 and 19 L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS		
224°	Rwy ldg	2256
	TDZE	2304
	Apt Elev	2304

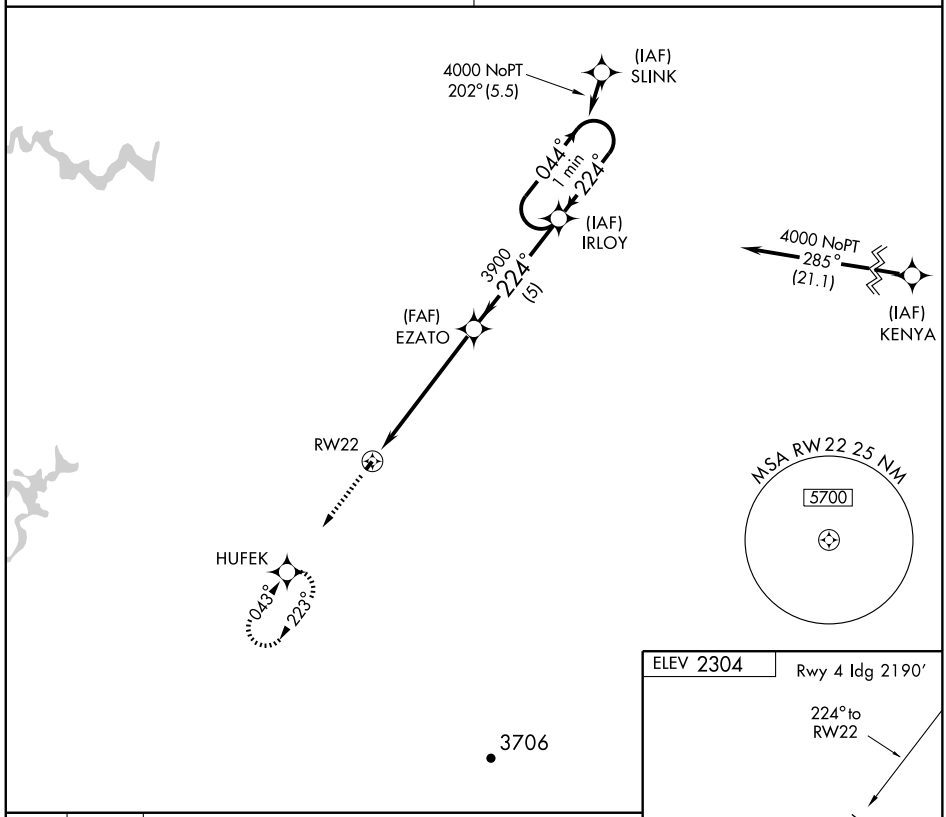
GPS RWY 22
GRUNDY MUNI (GDY)

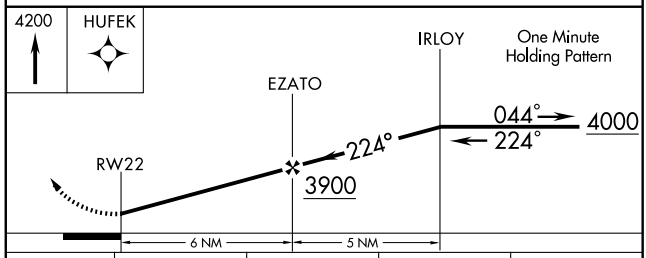
NA

Obtain local altimeter setting on CTAF, if not received, use Lonesome Pine altimeter setting and increase all MDAs 120 feet. Procedure not authorized at night.

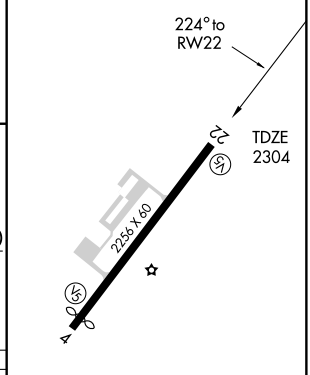
MISSED APPROACH: Climb to 4200 direct HUFEK WP and hold.

INDIANAPOLIS CENTER	UNICOM
126.575 257.85	123.0 (CTAF) L

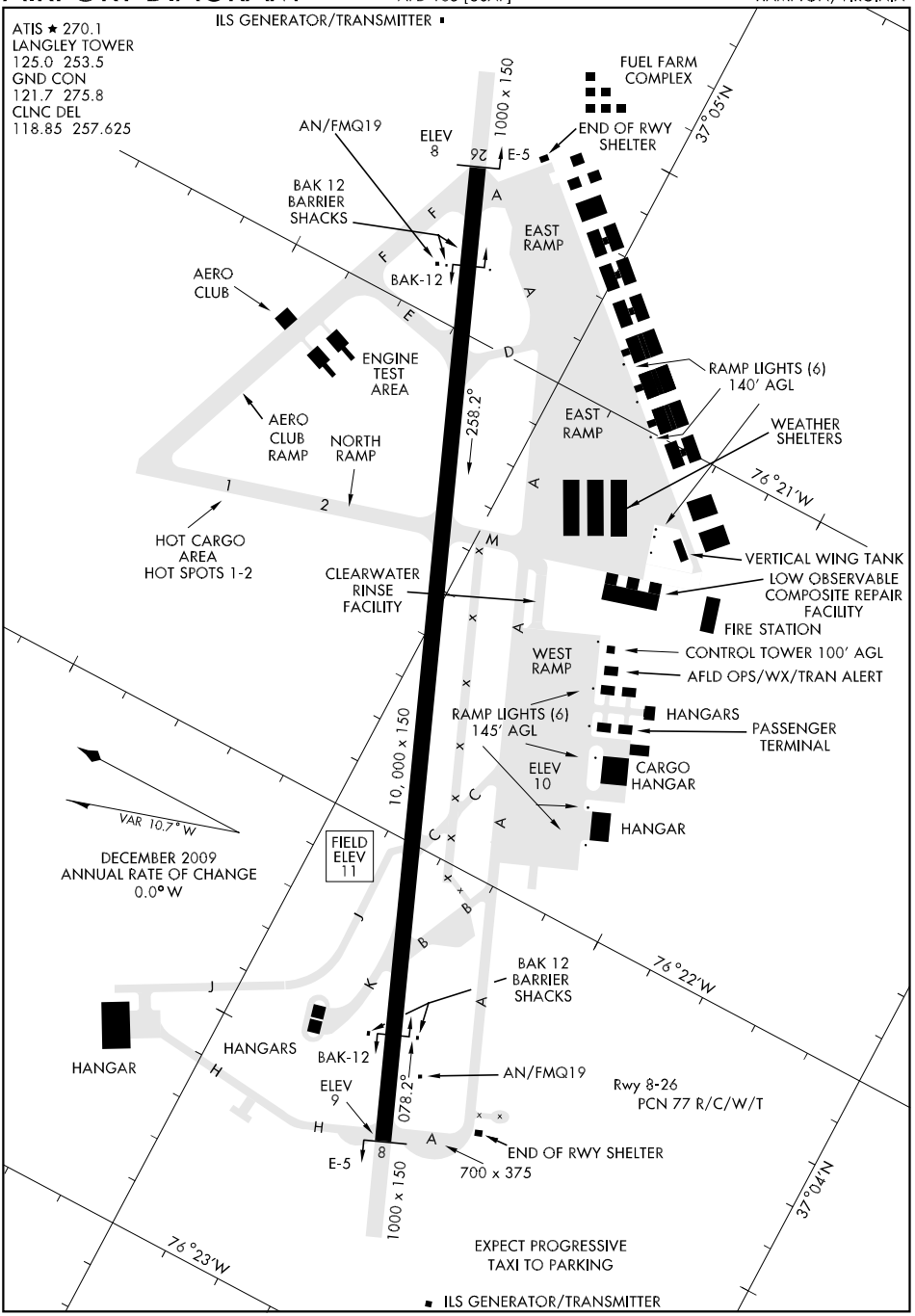




CATEGORY	A	B	C	D
S-22	2720-1 416 (500-1)		NA	
CIRCLING	2860-1 556 (600-1)		NA	

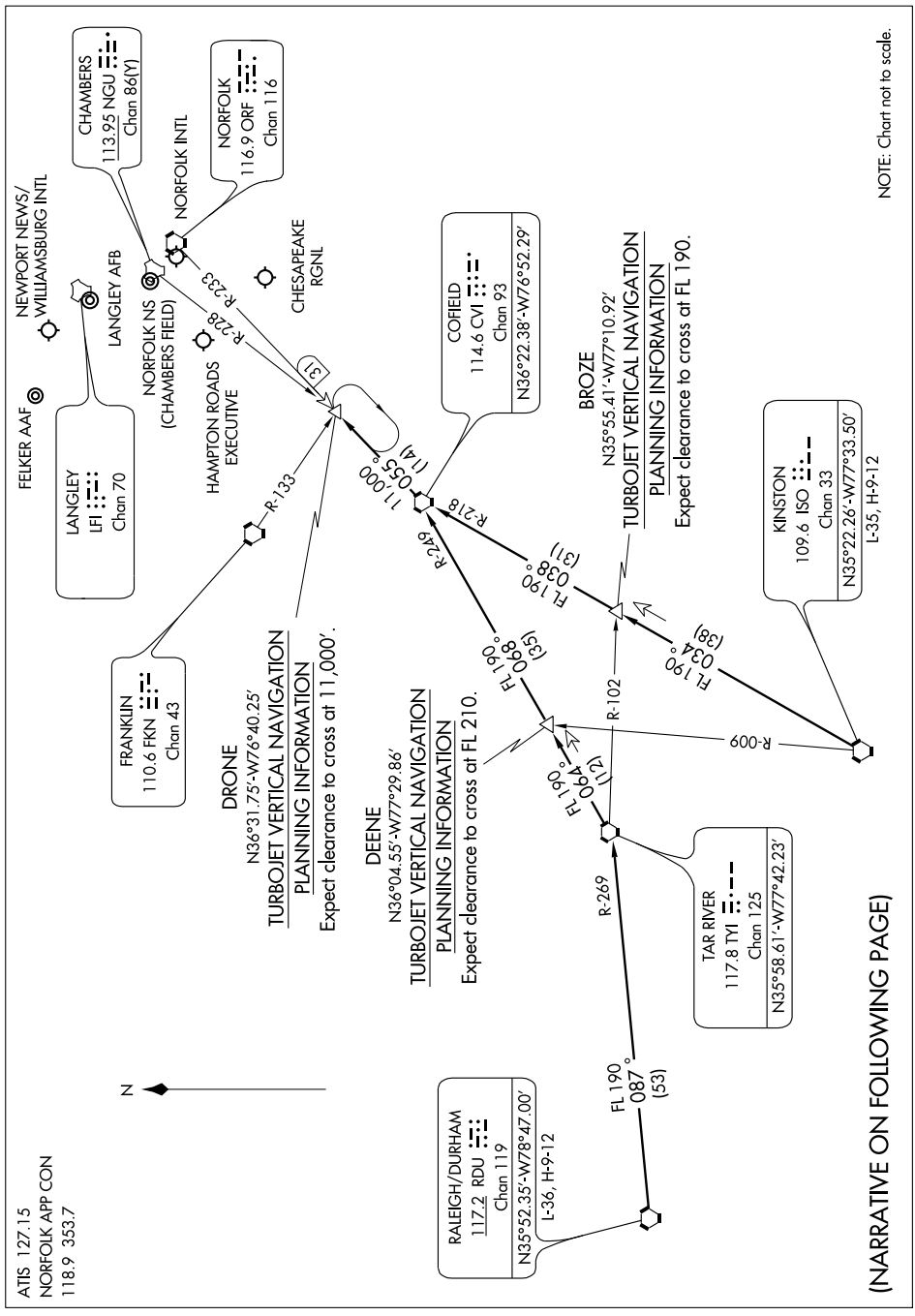


MIRL Rwy 4-22 L


ILS GENERATOR/TRANSMITTER
ATIS ★ 270.1
LANGLEY TOWER
125.0 253.5
GND CON
121.7 275.8
CLNC DEL
118.85 257.625
FUEL FARM COMPLEX
37°05'N
1000 x 150
END OF RWY SHELTER
E-5
26
ELEV 8
AN/FMQ19
BAK 12 BARRIER SHACKS
BAK-12
EAST RAMP
AERO CLUB
ENGINE TEST AREA
RAMP LIGHTS (6) 140' AGL
258.2°
EAST RAMP
WEATHER SHELTERS
AERO CLUB RAMP
NORTH RAMP
76°21'W
HOT CARGO AREA HOT SPOTS 1-2
VERTICAL WING TANK
CLEARWATER RINSE FACILITY
LOW OBSERVABLE COMPOSITE REPAIR FACILITY
FIRE STATION
WEST RAMP
CONTROL TOWER 100' AGL
AFLD OPS/WX/TRAN ALERT
RAMP LIGHTS (6) 145' AGL
HANGARS
PASSENGER TERMINAL
10,000 x 150
ELEV 10
CARGO HANGAR
VAR 10.7° W
HANGAR
DECEMBER 2009 ANNUAL RATE OF CHANGE 0.0° W
FIELD ELEV 11
76°22'W
BAK 12 BARRIER SHACKS
HANGAR
HANGARS
BAK-12
AN/FMQ19
ELEV 9
078.2°
Rwy 8-26 PCN 77 R/C/W/T
END OF RWY SHELTER
E-5
8
700 x 375
1000 x 150
37°04'N
76°23'W
EXPECT PROGRESSIVE TAXI TO PARKING
ILS GENERATOR/TRANSMITTER

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

HI-ILS RWY 8

LANGLEY AFB (KLFI)

LOC I-LFI	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.9	078°	10,000 / 9 / 11

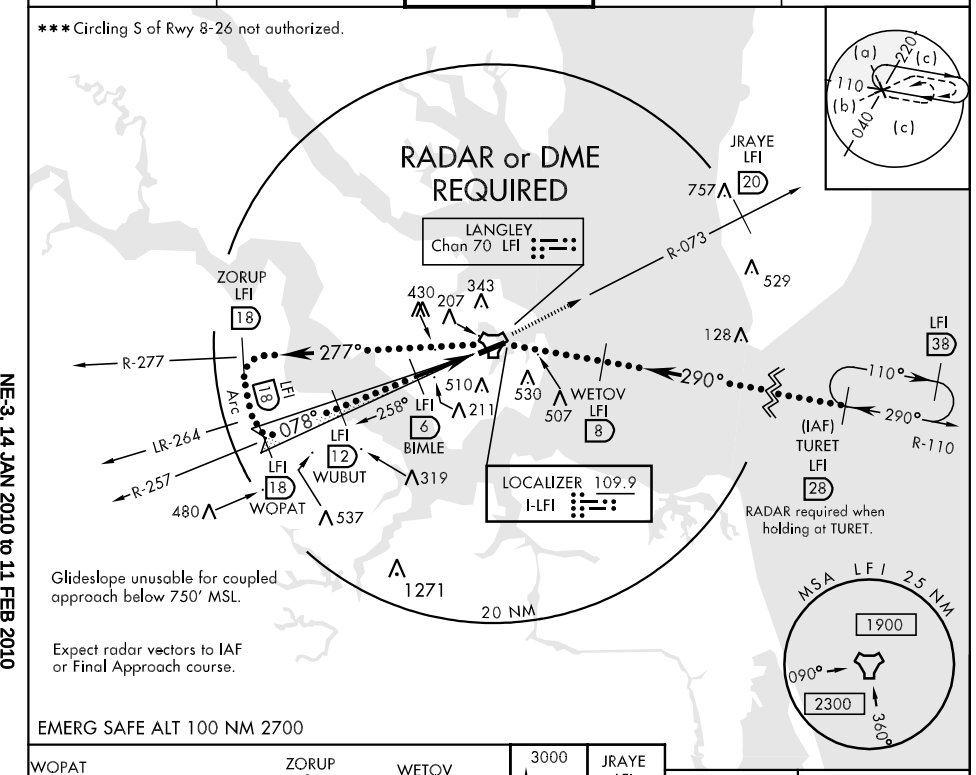
JAL-185 [USAF]

* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

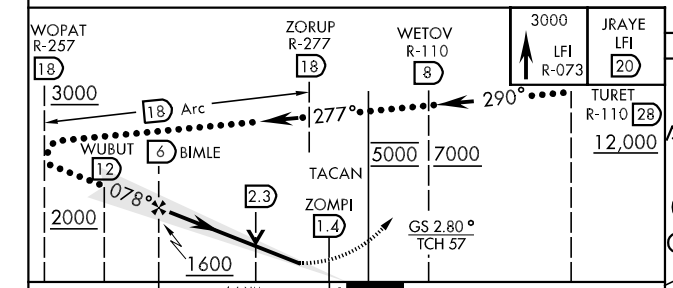
ALSF-1

MISSED APPROACH: Climb to 3000 via LFI R-073 to 20 DME (JRAYE).

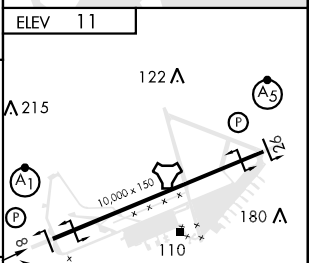
ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



EMERG SAFE ALT 100 NM 2700



ELEV 11



CATEGORY	C	D	E
S-ILS 8 *	209/24 200 (200-½)		
S-LOC 8 **	480/40 471 (500-¾)	480/50 471 (500-1)	480/60 471 (500-1¼)
CIRCLING ***	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

FAF to MAP 4.6 NM					
Knots	120	140	160	180	200
Min:Sec	2:18	1:58	1:43	1:32	1:23

HI-ILS RWY 26

LOC I-ABM	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.9	258°	10,000 / 10 / 11

JAL-185 [USAF]

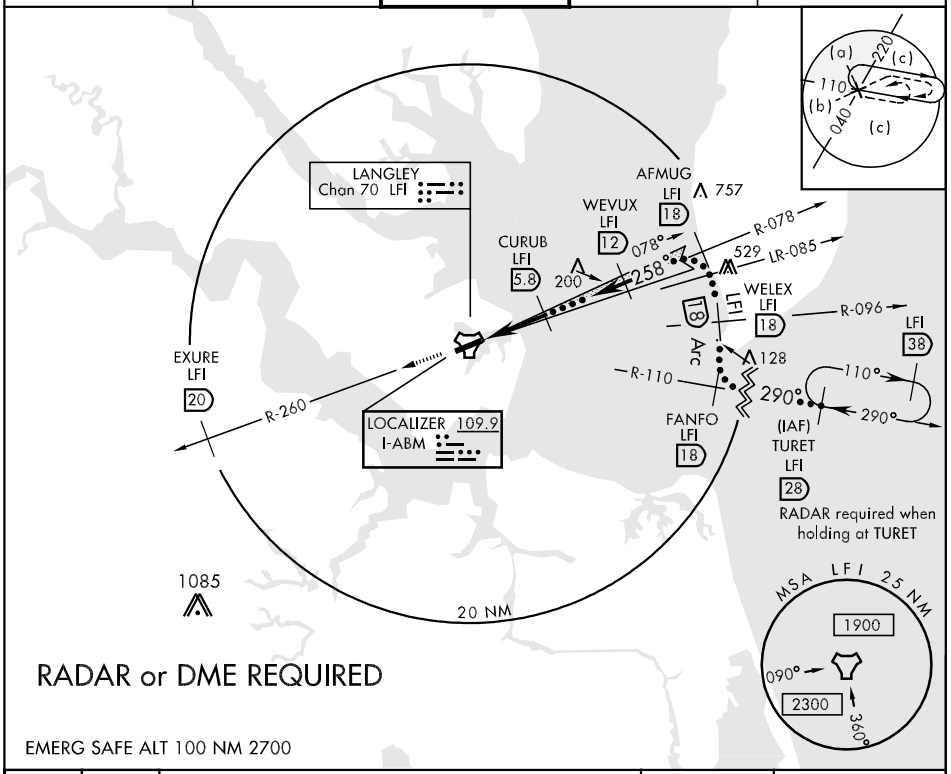
LANGLEY AFB (KLFI)

* When ALS inop, increase CAT C RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.
** Circling S of Rwy 8-26 not authorized.

MALSR A5

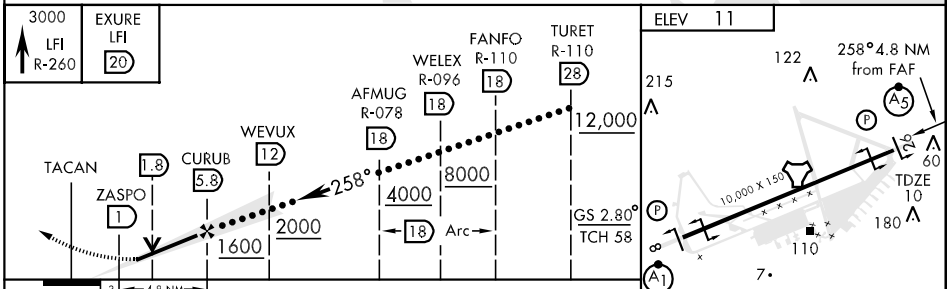
MISSED APPROACH: Climb to 3000 via LFI R-260 to 20 DME (EXURE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 2700



CATEGORY	C	D	E
S-ILS 26	210/40	200	(200-¾)
S-LOC 26*	400/40	390	(400-¾)
CIRCLING**	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

FAF to MAP 4.8 NM					
Knots	120	140	160	180	200
Min:Sec	2:24	2:03	1:48	1:36	1:26

HI-TACAN RWY 8

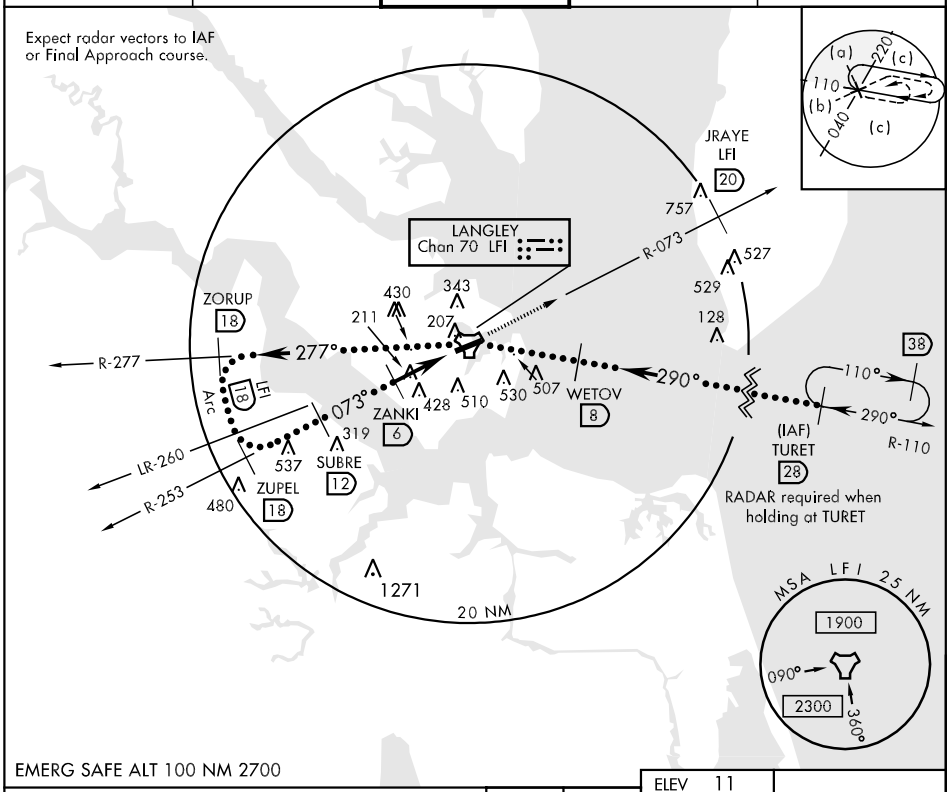
TACAN LFI Chan 70	APCH CRS 073°	Rwy ldg 10,000 TDZE 9 Arpt Elev 11	JAL-185 [USAF]	LANGLEY AFB (KLFI)

*When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½, CAT E vis to 1¾.
**Circling S of Rwy 8-26 not authorized.

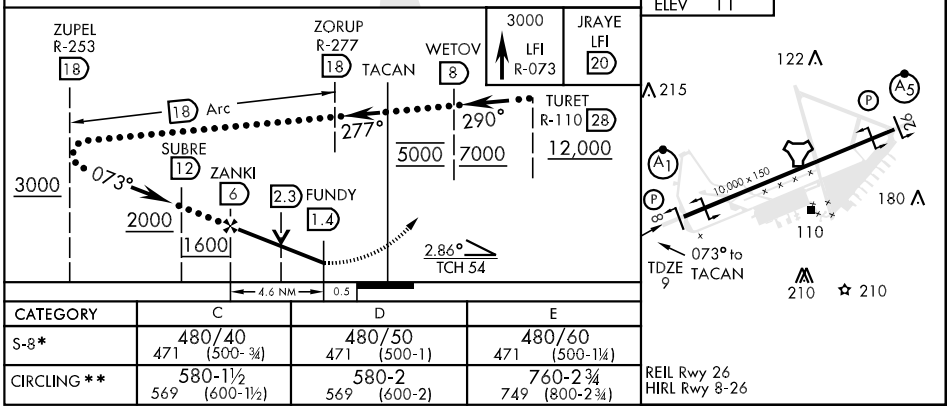
ALSF-1

MISSED APPROACH: Climb to 3000 via LFI R-073 to 20 DME (JRAYE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



EMERG SAFE ALT 100 NM 2700



CATEGORY	C	D	E
S-8*	480/40 471 (500-¾)	480/50 471 (500-1)	480/60 471 (500-1¼)
CIRCLING**	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

REIL Rwy 26
HIRL Rwy 8-26

HI-TACAN RWY 26

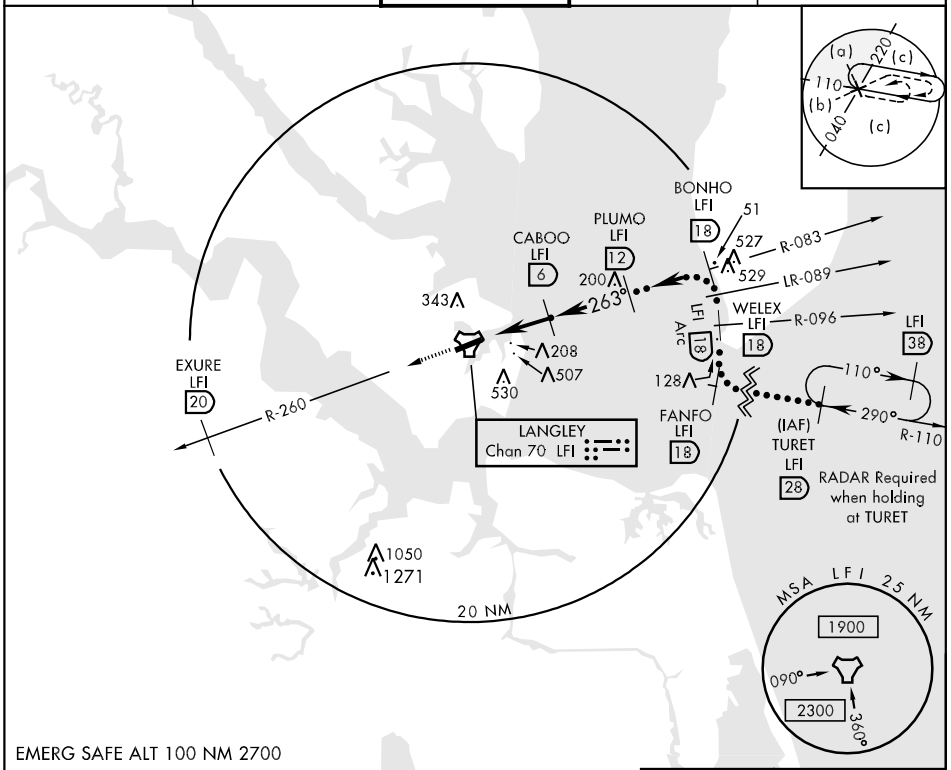
TACAN LFI Chan 70	APCH CRS 263°	Rwy ldg 10,000 TDZE 10 Arpt Elev 11	JAL-185 [USAF]	LANGLEY AFB (KLFI)

T * When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.
** Circling S of Rwy 8-26 not authorized.

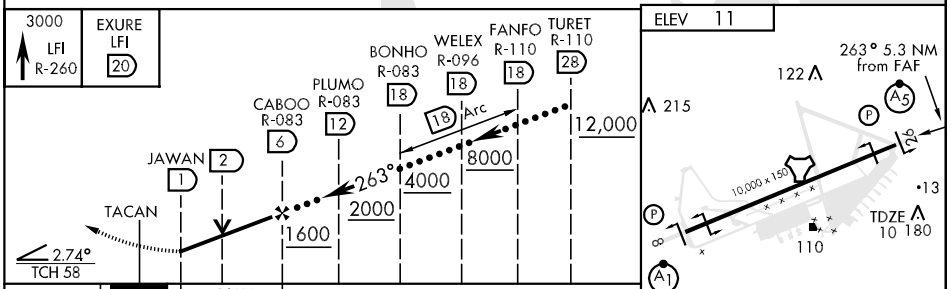
MALSR A5

MISSED APPROACH: Climb to 3000 via LFI R-260 to 20 DME (EXURE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



EMERG SAFE ALT 100 NM 2700



CATEGORY	C	D	E
S-26 *	440/40 430 (500-¾)	440/50 430 (500-1)	
CIRCLING **	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

REIL Rwy 26
HIRL Rwy 8-26

ILS RWY 8

LOC I-LFI	APCH CRS	Rwy ldg / TDZE / Arpt Elev	AL-185 [USAF]	LANGLEY AFB (KLFI)
109.9	078°	10,000 / 9 / 11		

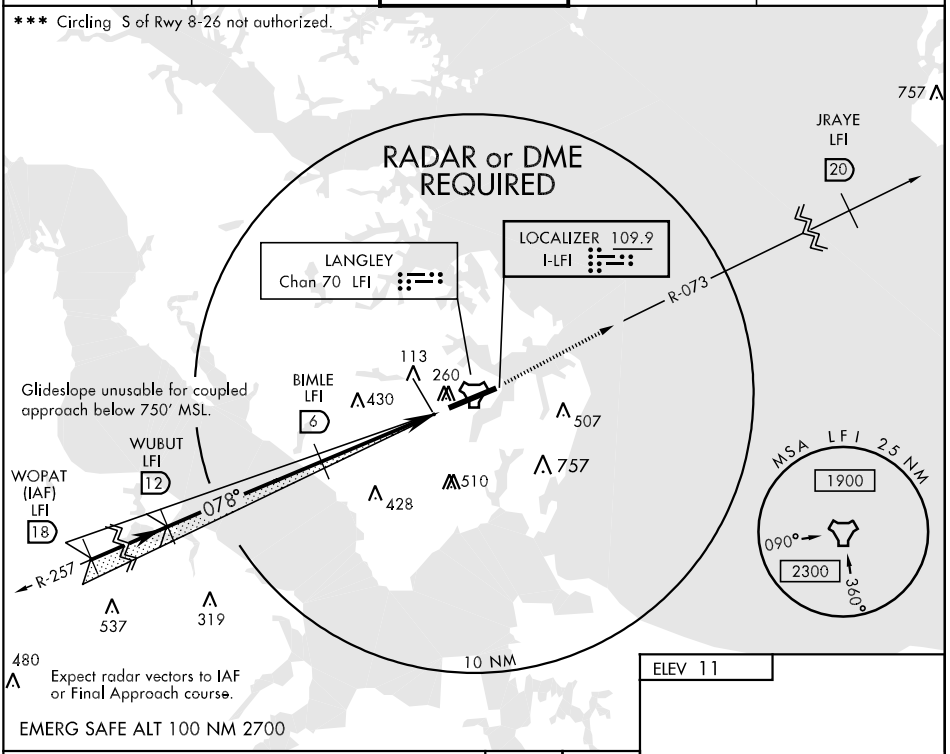
* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

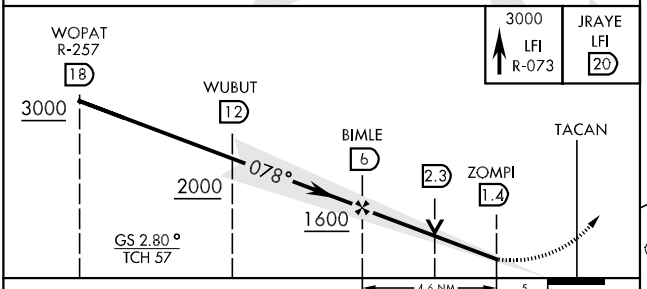
MISSED APPROACH: Climb to 3000 via LFI R-073 to 20 DME (JRAYE).

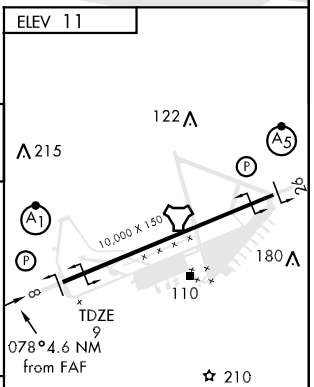
ATIS ★	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625

*** Circling S of Rwy 8-26 not authorized.



EMERG SAFE ALT 100 NM 2700





REIL Rwy 26
HIRL Rwy 8-26

CATEGORY	A	B	C	D	E
S-ILS 8 ★	209/24		200 (200-½)		
S-LOC 8 ★★	480/24	471 (500-½)	480/40 471 (500-¾)	480/50 471 (500-1)	480/60 471 (500-1¼)
CIRCLING★★★	540-1	529 (600-1)	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

ILS RWY 26

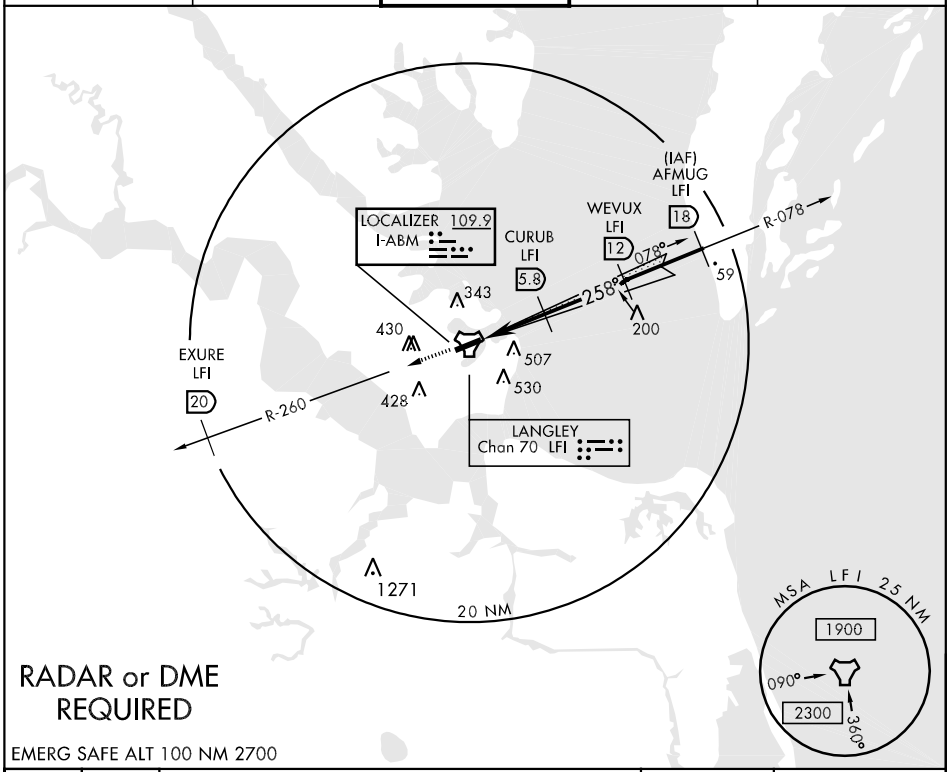
LOC I-ABM	APCH CRS	Rwy ldg 10,000 TDZE 10 Arpt Elev 11	JAL-185 [USAF]	LANGLEY AFB (KLFI)
109.9	258°			

* When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.
** Circling S of Rwy 8-26 not authorized.

MALSR A5

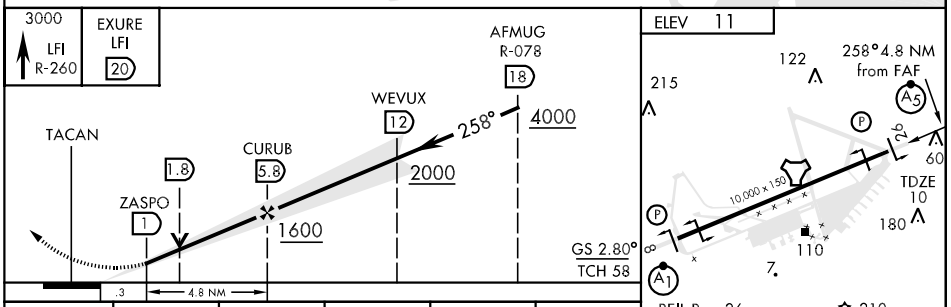
MISSED APPROACH: Climb to 3000 via LFI R-260 to 20 DME (EXURE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 2700



CATEGORY	A	B	C	D	E
S-ILS 26	210/40		200		(200-¾)
S-LOC 26 *	400/40		390		(400-¾)
CIRCLING **	540-1 529 (600-1)		580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

RNAV (GPS) RWY 26

APCH CRS	Rwy ldg	10,000
258°	TDZE	10
	Arpt Elev	11

AL-185 [USAF]

LANGLEY AFB (KLFI)

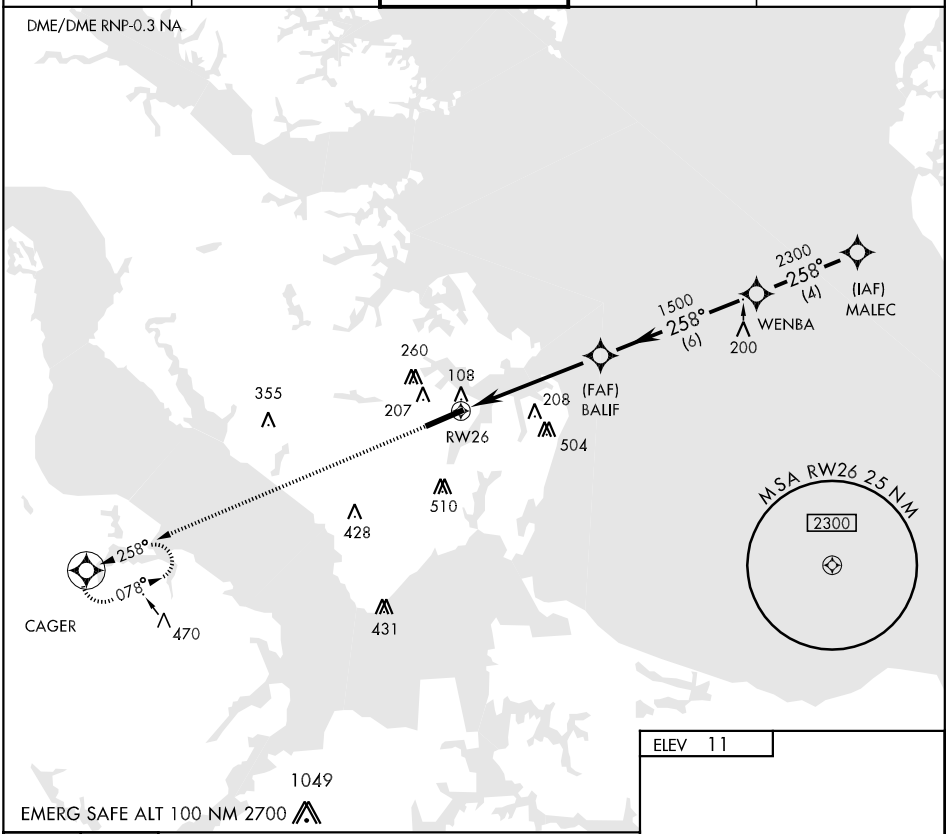
T * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling S of Rwy 8-26 not authorized for CAT E acft.

MALSR A5

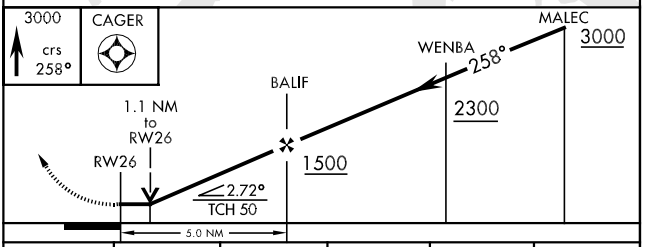
MISSED APPROACH: Climb to 3000 on course 258° to CAGER WPT and hold.

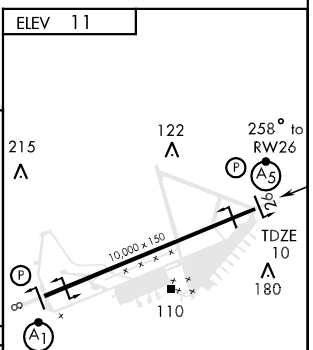
ATIS ★	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625

DME/DME RNP-0.3 NA



EMERG SAFE ALT 100 NM 2700





REIL Rwy 26
HIRL Rwy 8-26

CATEGORY	A	B	C	D	E
LNAV MDA *	520/40 510 (600-¾)		520/50 510 (600-1)		520/60 510 (600-1¼)
CIRCLING **	540-1 529 (600-1)		580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749(800-2¾)

TACAN RWY 8

TACAN LFI Chan 70	APCH CRS 073°	Rwy ldg 10,000 TDZE 9 Arpt Elev 11	AL-185 [USAF]	LANGLEY AFB (KLFI)

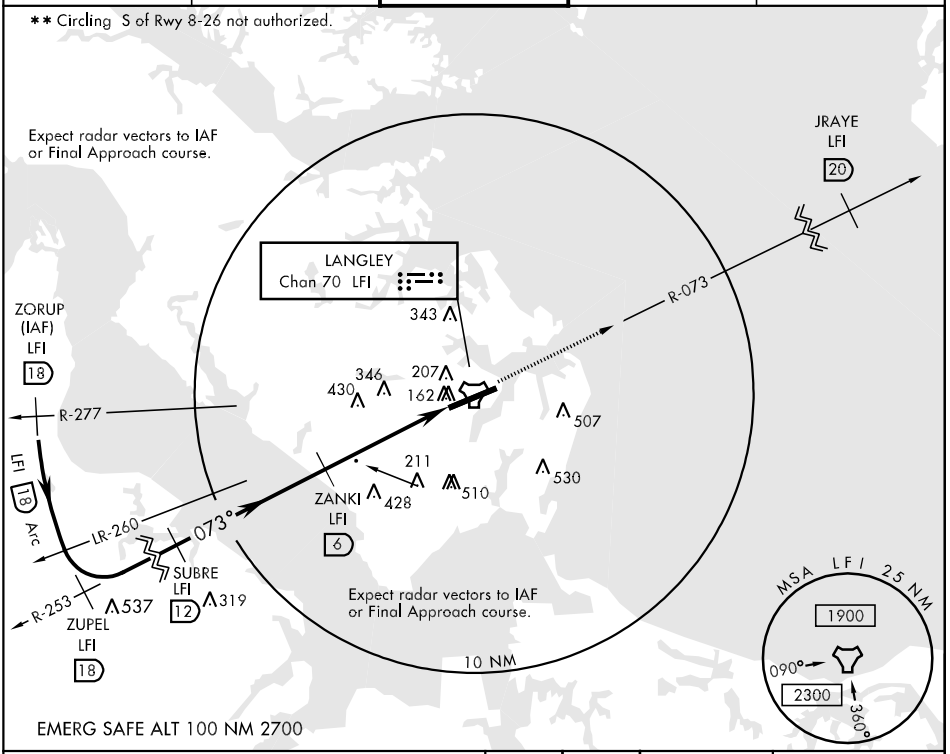
*When ALS inop, increase CAT AB RVR to 50 and vis to1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

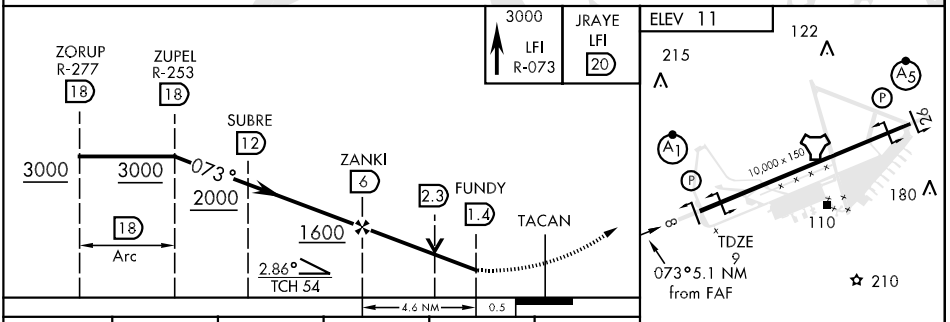
MISSED APPROACH: Climb to 3000 via LFI R-073 to 20 DME (JRAYE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625

** Circling S of Rwy 8-26 not authorized.



EMERG SAFE ALT 100 NM 2700



CATEGORY	A	B	C	D	E
TAC 8 *	480/24	471 (500-½)	480/40 471 (500-¾)	480/50 471 (500-1)	480/60 471 (500-1¼)
CIRCLING **	540-1	529 (600-1)	580-1½ 569 (600-1½)	580-2 569 (600-2)	760-2¾ 749 (800-2¾)

REIL Rwy 26
HIRL Rwy 8-26

TACAN RWY 26

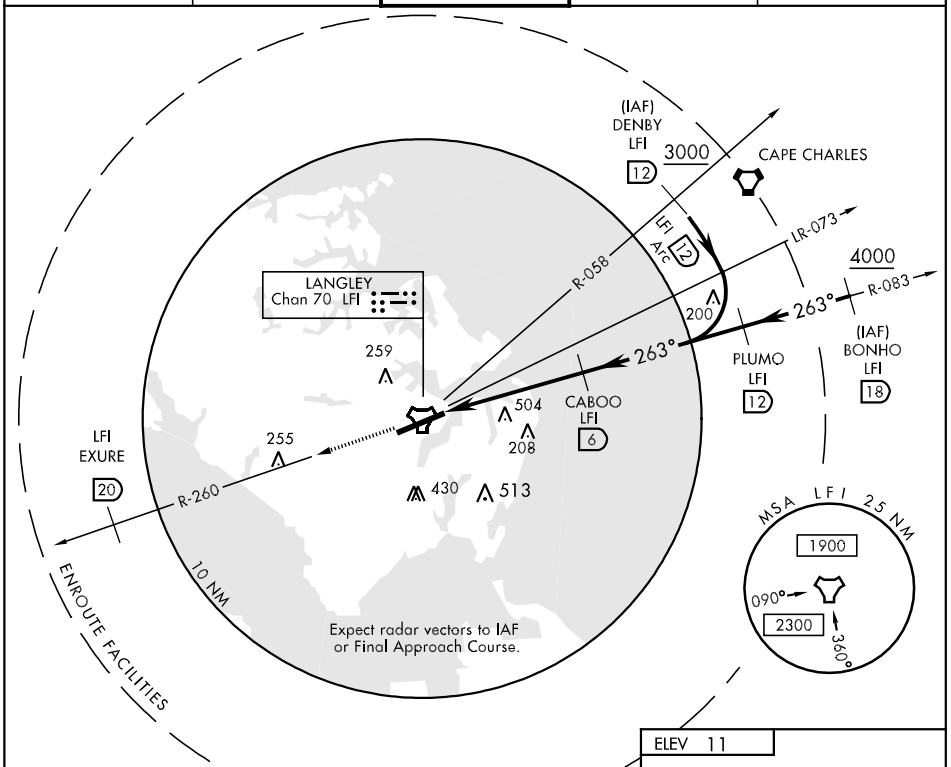
TACAN LFI Chan 70	APCH CRS 263°	Rwy ldg 10,000 TDZE 10 Arpt Elev 11	AL-185 [USAF]	LANGLEY AFB (KLFI)

T * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.
** Circling S of Rwy 8-26 not authorized.

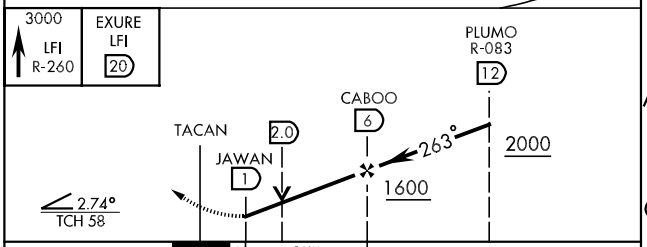
MALSR A5

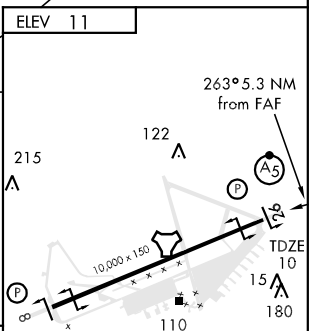
MISSED APPROACH: Climb to 3000 via LFI R-260 to 20 DME (EXURE).

ATIS *	NORFOLK APP CON	LANGLEY TOWER	GND CON	CLNC DEL
270.1	125.7 335.625	125.0 253.5	121.7 275.8	118.85 257.625



EMERG SAFE ALT 100 NM 2700





CATEGORY	A	B	C	D	E
S- 26 *	440/40 430		(500-¾)	440/50 430	(500-1)
CIRCLING **	540-1 529	(600-1)	580-1 ½ 569 (600-1½)	580-2 569 (600-2)	760-2 ¾ 749 (800-2¾)

APP CRS	Rwy ldg	5600
245°	TDZE	3772
	Apt Elev	3792

GPS RWY 25

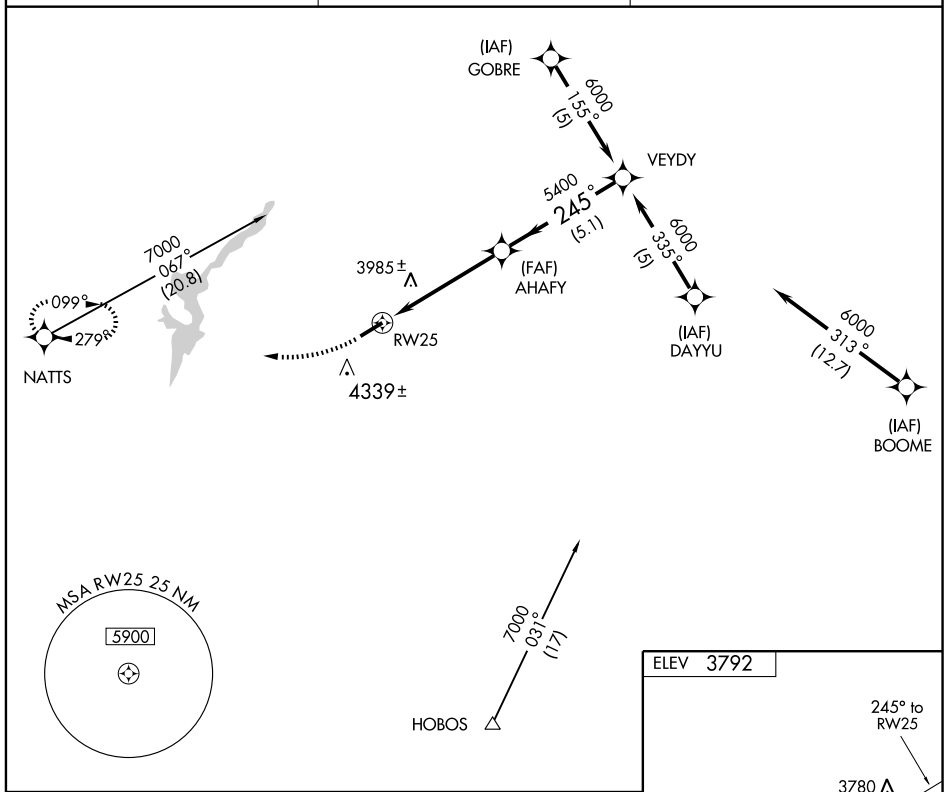
HOT SPRINGS/INGALLS FIELD (HSP)

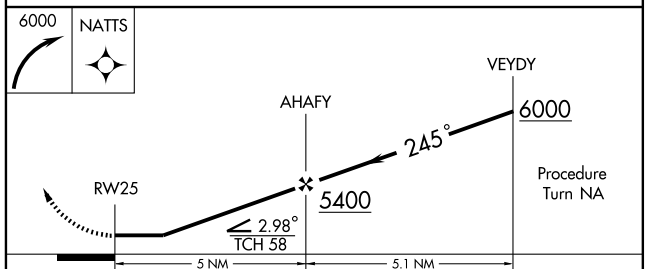
NA

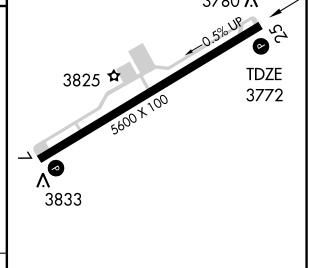
Circling NA SE of Rwy 7-25.

MISSED APPROACH: Climbing right turn to 6000 direct NATTS WP and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
118.8	134.4 353.9	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-25	4440-1 668 (700-1)		4440-1¾ 668 (700-1¾)	4440-2 668 (700-2)
CIRCLING	4840-1¼ 1048 (1100-1¼)	4840-1½ 1048 (1100-1½)	4840-3 1048 (1100-3)	

REIL Rwy 25 L
HIRL Rwy 7-25 L

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC I-HSP	APP CRS	Rwy ldg	5600
108.7	247°	TDZE	3773
		Apt Elev	3793

ILS or LOC RWY 25

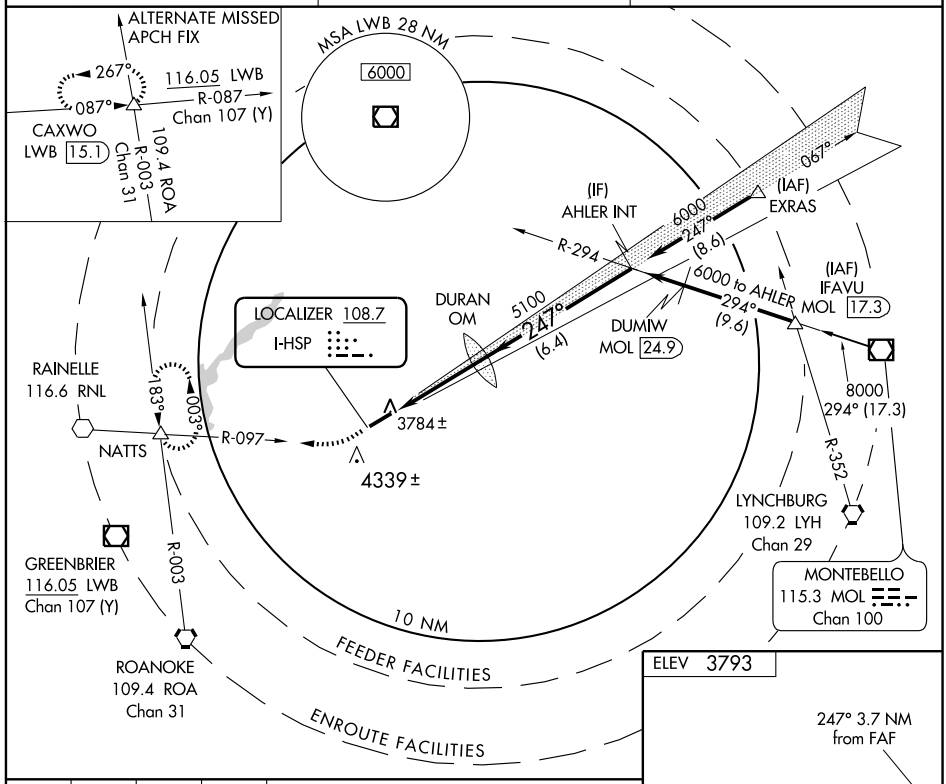
HOT SPRINGS/INGALLS FIELD (HSP)

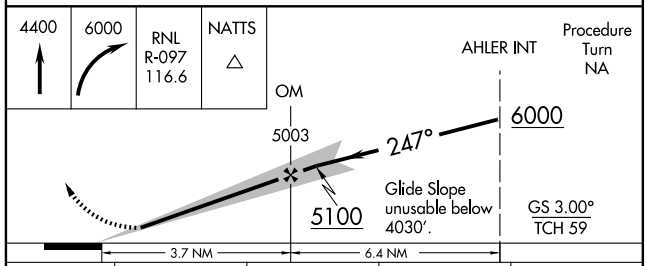
T
A NA

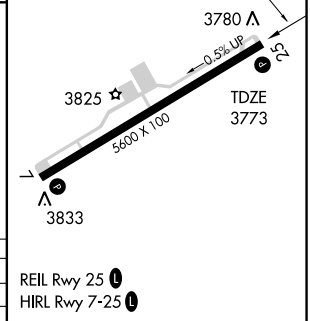
Circling NA southeast of Rwy 7-25. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 4400 then climbing right turn to 6000 via RNL VOR R-097 to NATTS INT and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
118.8	134.4 353.9	123.0 (CTAF) L







REIL Rwy 25 L
HIRL Rwy 7-25 L

CATEGORY	A	B	C	D
S-ILS 25	4088-1 315 (300-1)			
S-LOC 25	4240-1 467 (500-1)		4240-1¼ 467 (500-1¼)	4240-1½ 467 (500-1½)
CIRCLING	4440-1 647 (700-1)		4480-2 687 (700-2)	4480-2¼ 687 (700-2¼)

FAF to MAP 3.7 NM					
Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

NE-3. 14 JAN 2010 to 11 FEB 2010

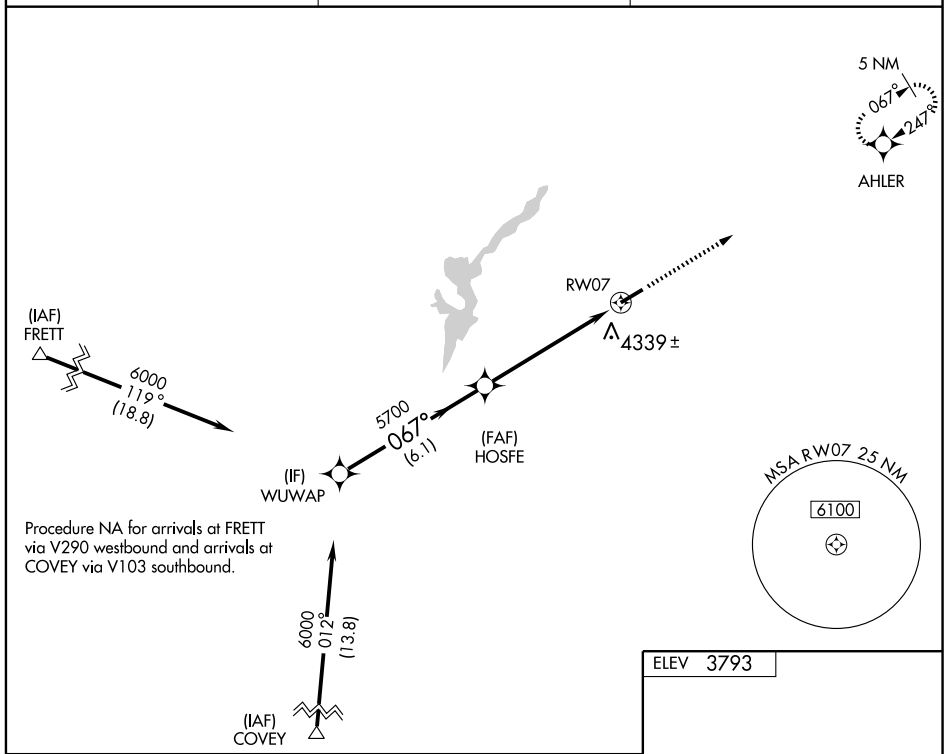
WAAS CH 86813 W07A	APP CRS 067°	Rwy ldg 5600 TDZE 3793 Apt Elev 3793

RNAV (GPS) RWY 7
HOT SPRINGS/INGALLS FIELD (HSP)

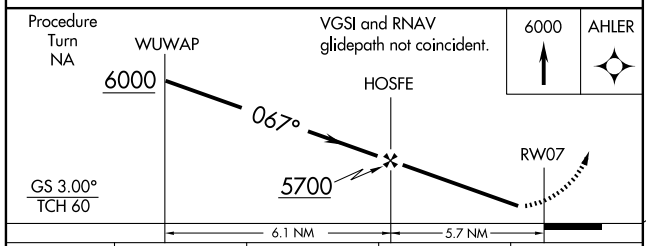
Circling NA southeast of Rwy 7-25. Baro-VNAV NA.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, procedure NA.

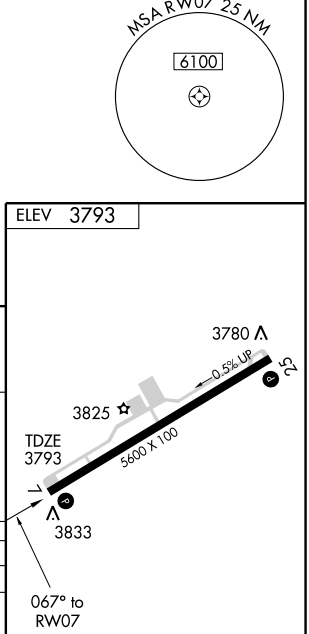
MISSED APPROACH: Climb to 6000 direct AHLER and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
118.8	134.4 353.9	123.0 (CTAF) L



Procedure NA for arrivals at FRETT via V290 westbound and arrivals at COVEY via V103 southbound.





CATEGORY	A	B	C	D
LPV DA	4143-1¼ 350 (400-1¼)			
LNAV/VNAV DA	4619-3 826 (900-3)			
LNAV MDA	4700-1¼ 907 (1000-1¼)		4700-2¾ 907 (1000-2¾)	4700-3 907 (1000-3)
CIRCLING	4700-1¼ 907 (1000-1¼)		4700-2¾ 907 (1000-2¾)	4700-3 907 (1000-3)

REIL Rwy 25 L
HIRL Rwy 7-25 L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5000
066°	TDZE	1403
	Apt Elev	1411

RNAV (GPS) RWY 7

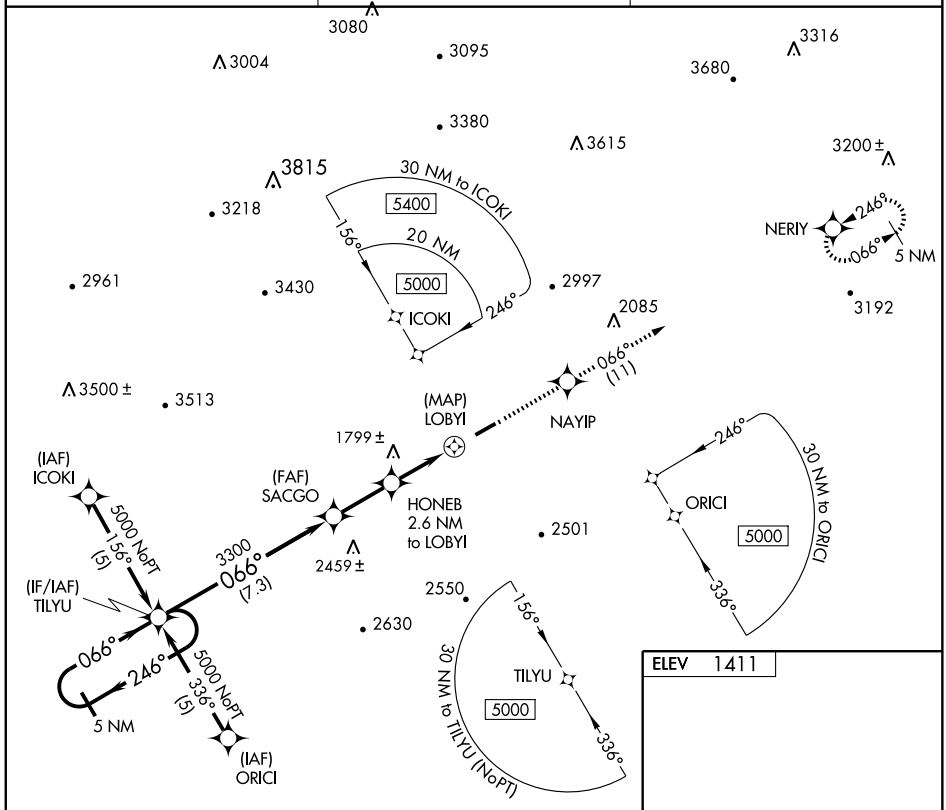
JONESVILLE / LEE COUNTY (ØVG)

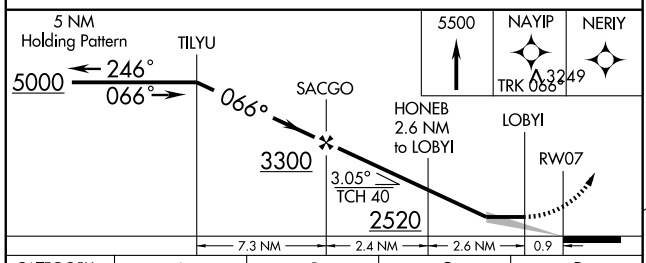
Use Morristown, TN altimeter setting; if not received, use Middlesboro, KY altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA.

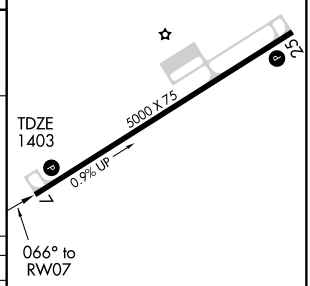
NA

MISSED APPROACH: Climb to 5500 direct NAYIP and via 066° track to NERIY and hold, continue climb-in-hold to 5500.

MORRISTOWN AWOS-3	ATLANTA CENTER	CTAF
126.725	127.85 371.85	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	2140-1 737 (800-1)		2140-2 737 (800-2)	2140-2¼ 737 (800-2¼)
CIRCLING	2200-1 789 (800-1)	2200-1¼ 789 (800-1¼)	2200-2¼ 789 (800-2¼)	2280-2¾ 869 (900-2¾)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

NE-3. 14 JAN 2010 to 11 FEB 2010

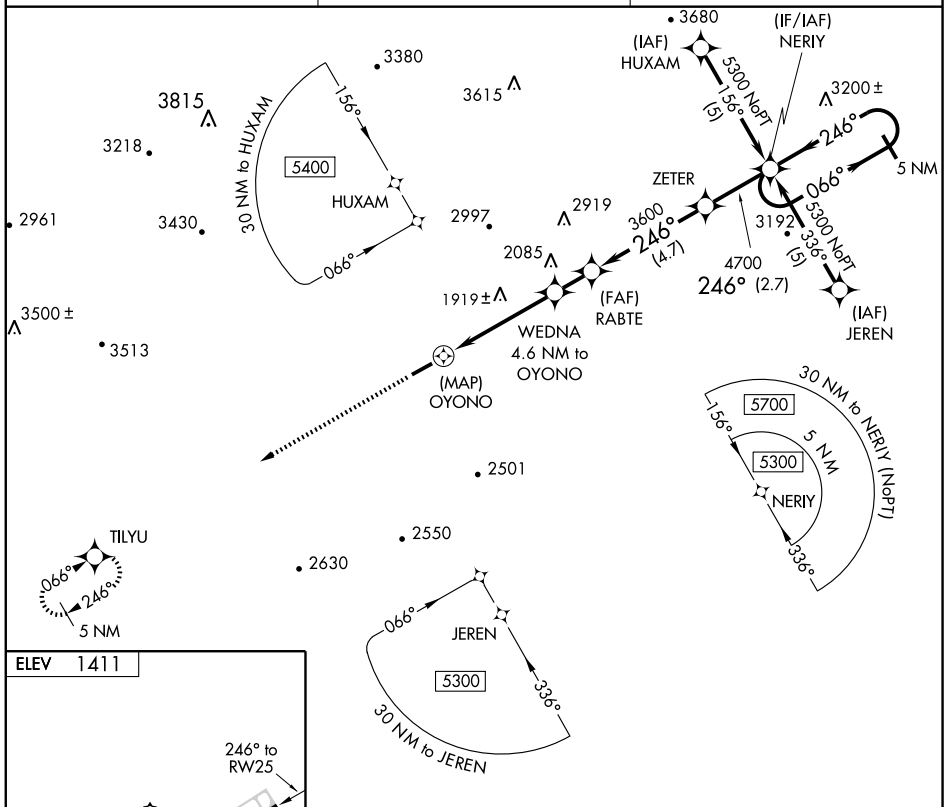
APP CRS	Rwy ldg	5000
246°	TDZE	1411
	Apt Elev	1411

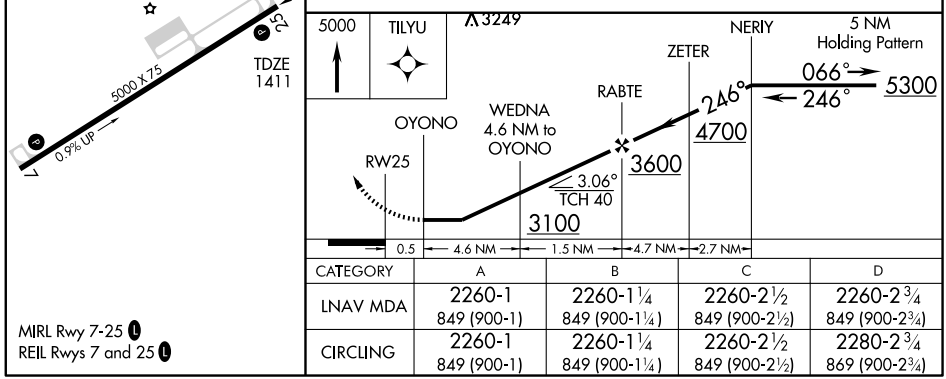
RNAV (GPS) RWY 25
JONESVILLE / LEE COUNTY (ØVG)

DME/DME RNP-0.3 NA. Use Morristown, TN altimeter setting; if not received, use Middlesboro, KY altimeter setting and increase all MDAs 20 feet. Visibilty reduction by helicopters NA.

MISSED APPROACH: Climb to 5000 direct TILYU and hold.

MORRISTOWN AWOS-3	ATLANTA CENTER	CTAF
126.725	127.85 371.85	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	2260-1 849 (900-1)	2260-1¼ 849 (900-1¼)	2260-2½ 849 (900-2½)	2260-2¾ 849 (900-2¾)
CIRCLING	2260-1 849 (900-1)	2260-1¼ 849 (900-1¼)	2260-2½ 849 (900-2½)	2280-2¾ 869 (900-2¾)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

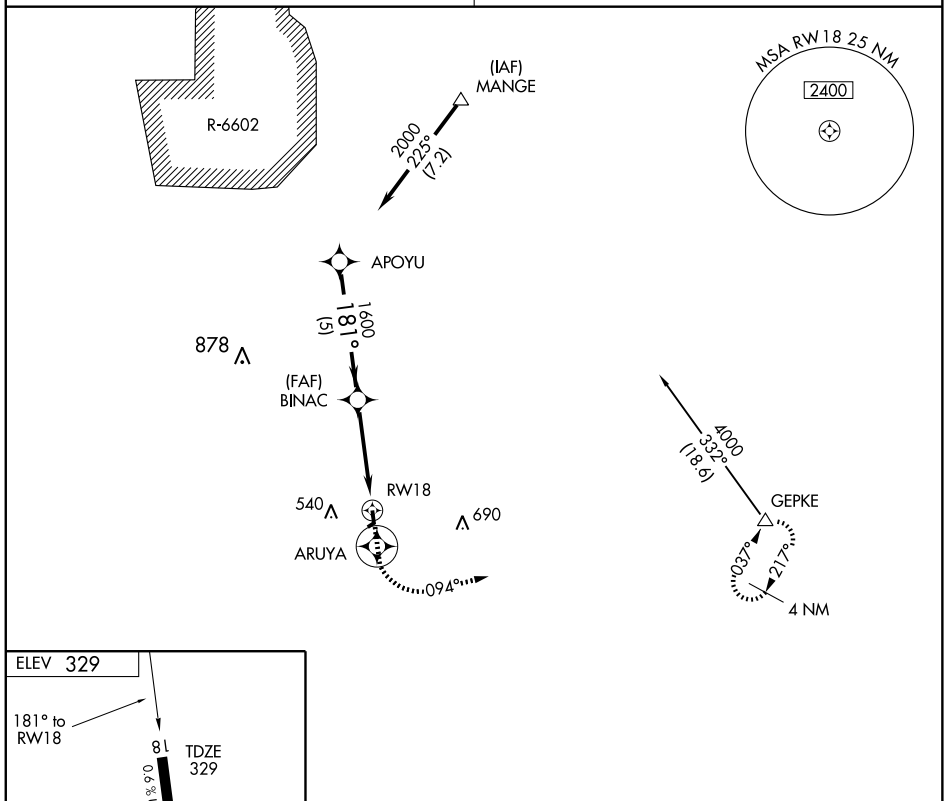
APP CRS	Rwy ldg	3020
181°	TDZE	329
	Apt Elev	329

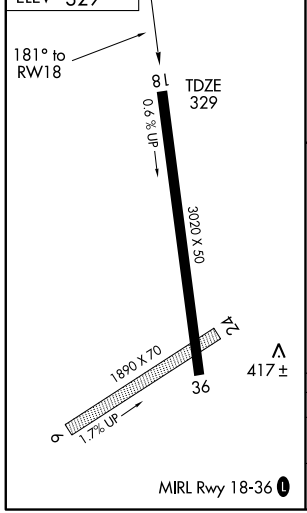
RNAV (GPS) RWY 18
LAWRENCEVILLE/BRUNSWICK MUNI (LVL)

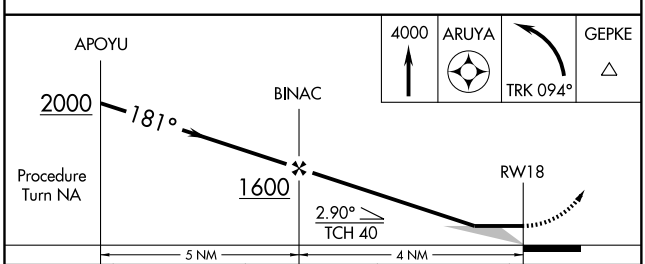
Use Mecklenburg/Brunswick altimeter setting.
DME/DME RNP-0.3 NA. GPS or RNP-0.3 required.
Circling NA to Rwy 6/24.

MISSED APPROACH: Climb to 4000 direct ARUYA WP and left turn via 094° track to GEPKE WP and hold.

WASHINGTON APP CON	UNICOM
118.75 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	840-1	511 (600-1)	NA	
CIRCLING	940-1	611 (700-1)	NA	

APP CRS	Rwy ldg	3020
001°	TDZE	327
	Apt Elev	329

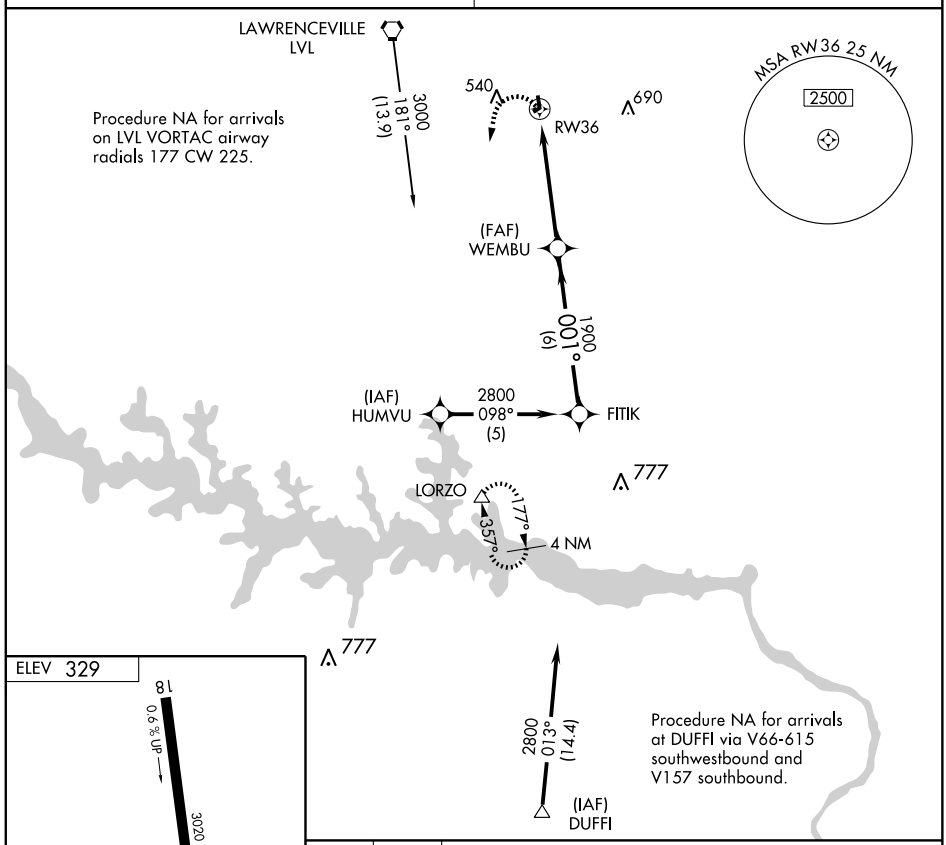
RNAV (GPS) RWY 36
LAWRENCEVILLE/BRUNSWICK MUNI (LVL)

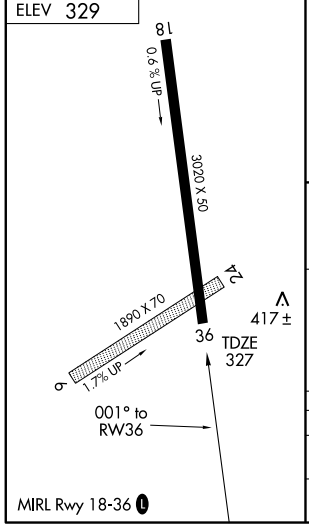
NA

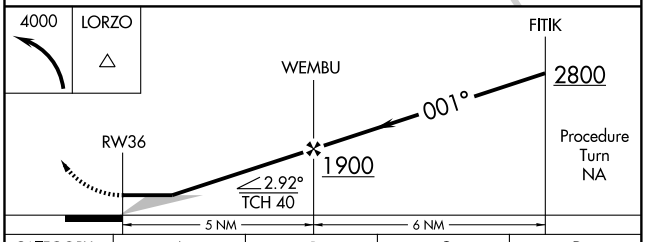
Use Mecklenburg/Brunswick altimeter setting.
DME/DME RNP-0.3 NA. GPS or RNP-0.3 required.
Circling NA to Rwy 6/24.

MISSED APPROACH: Climbing left turn to 4000 direct LORZO WP and hold.

WASHINGTON APP CON	UNICOM
118.75 377.1	122.8 (CTAF) L



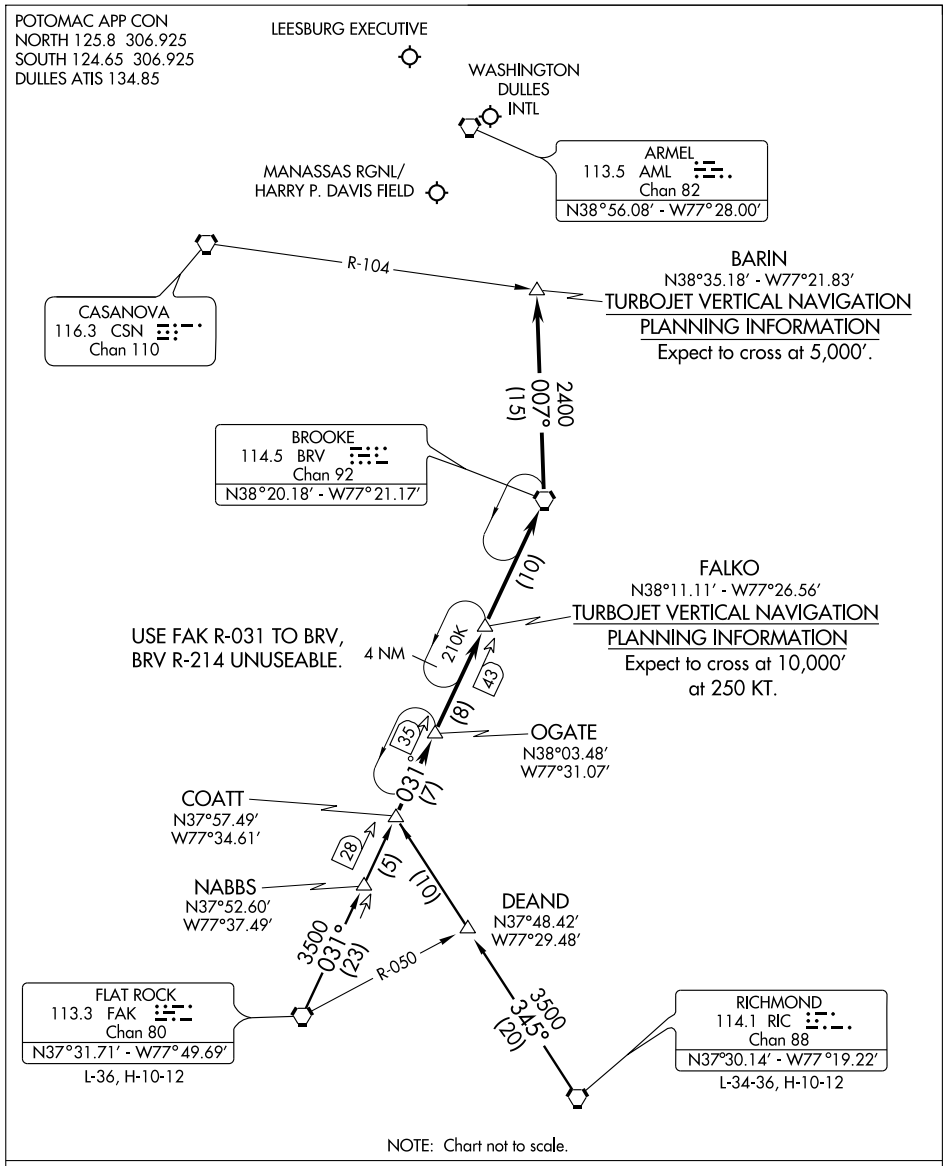




CATEGORY	A	B	C	D
LNAV MDA	760-1	433 (500-1)	NA	
CIRCLING	940-1	611 (700-1)	NA	

COATT FOUR ARRIVAL

WASHINGTON, DC



NOTE: Chart not to scale.

FLAT ROCK TRANSITION (FAK.COATT4): From over FAK VORTAC via FAK R-031 to COATT INT. Thence . . . .

RICHMOND TRANSITION (RIC.COATT4): From over RIC VORTAC via RIC R-345 to COATT INT. Thence . . . .

. . . . From over COATT INT via FAK R-031 to BRV VORTAC, then from over BRV VORTAC via BRV R-007 to BARIN INT. Expect radar vectors to final approach course after BARIN INT.

NE-3, 14 JAN 2010 to 11 FEB 2010

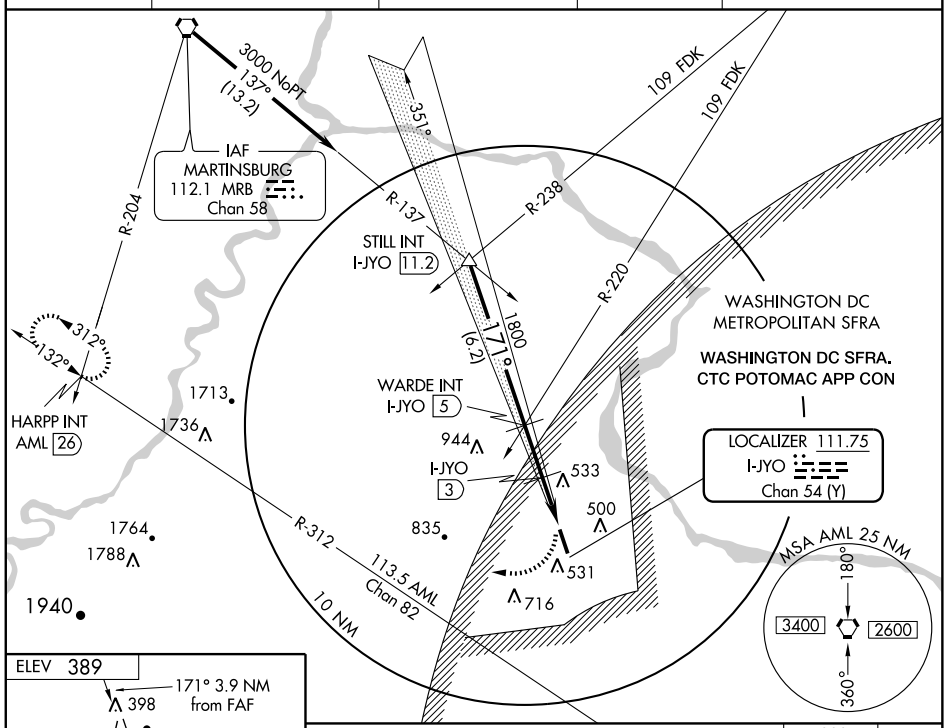
LOC I-JYO 111.75 Chan 54 (Y)	APP CRS 171°	Rwy ldg 5500 TDZE 382 Apt Elev 389

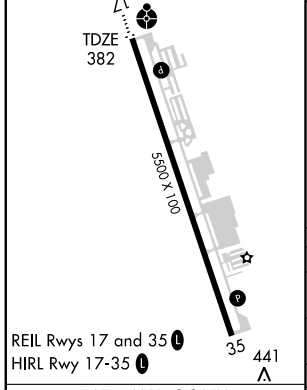
LOC RWY 17
LEESBURG EXECUTIVE (JYO)

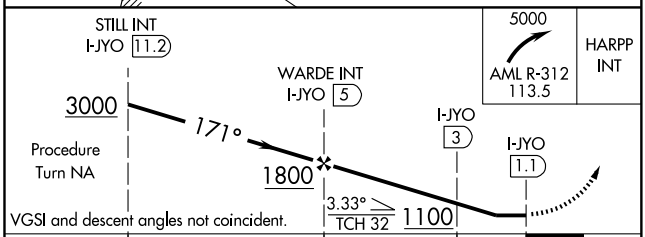
ODALS

MISSED APPROACH: Climbing right turn to 5000 via AML R-312 to HARPP Int AML 26 DME and hold.

AWOS-3	POTOMAC APP CON	LEESBURG RADIO	CLNC DEL	UNICOM
125.225	126.1 338.25	122.6	118.55	122.975 (CTAF) L







FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

CATEGORY	A	B	C	D
S-17	1100-1 718 (800-1)		1100-2 718 (800-2)	1100-2¼ 718 (800-2¼)
CIRCLING	1100-1 711 (800-1)		1100-2 711 (800-2)	1100-2¼ 711 (800-2¼)
DME MINIMUMS				
S-17	720-1 338 (400-1)			
CIRCLING	840-1 451 (500-1)		900-1½ 511 (600-1½)	1040-2 651 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 60902 W17A	APP CRS 171°	Rwy ldg 5500 TDZE 382 Apt Elev 389

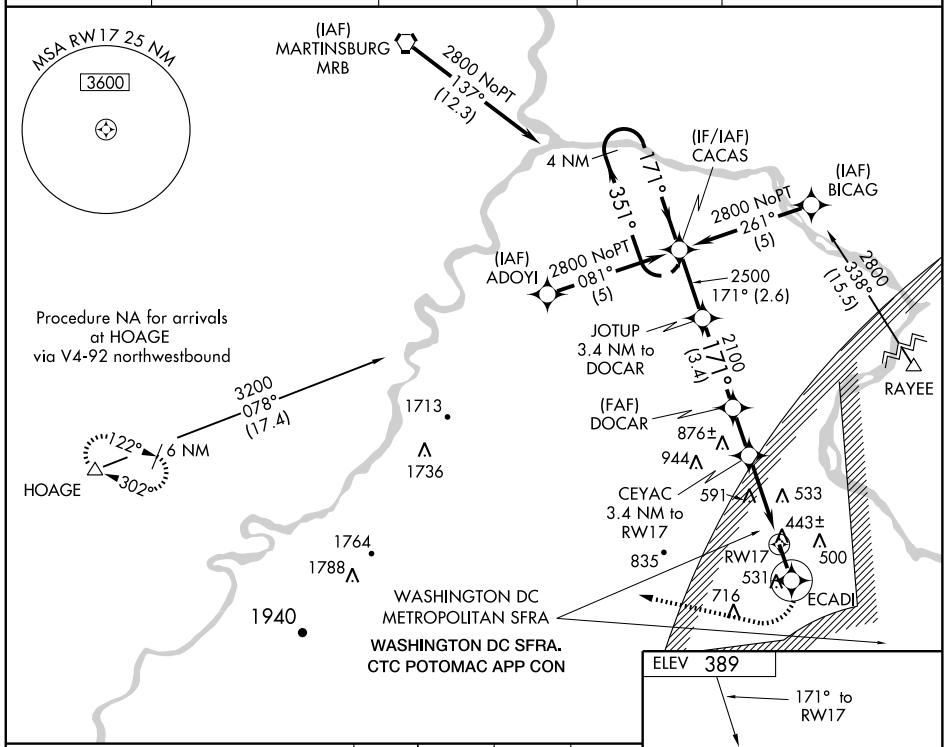
RNAV (GPS) RWY 17
LEESBURG EXECUTIVE (JYO)

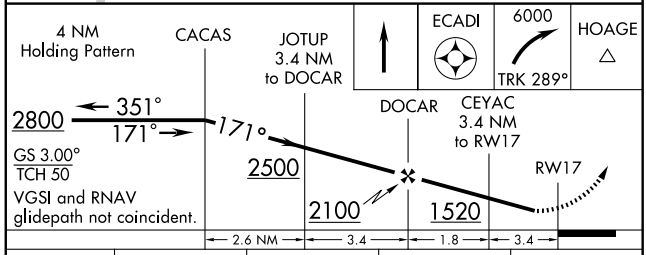
Inoperative table does not apply to ODALS Rwy 17.
Baro-VNAV NA below -15°C (5°F). DME/DME RNP-0.3 NA.
When VGSI inoperative, straight-in/circling Rwy 17 procedure NA at night.

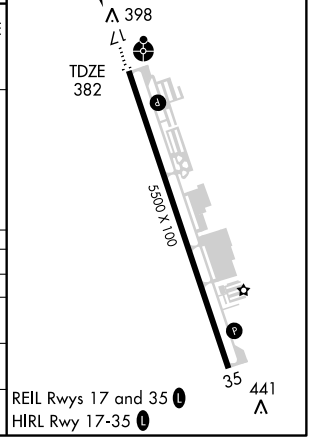
ODALS

MISSED APPROACH: Climb direct ECADI then climbing right turn to 6000 via 289° track to HOAGE and hold.

AWOS-3	POTOMAC APP CON	LEESBURG RADIO	CLNC DEL	UNICOM
125.225	126.1 338.25	122.6	118.55	122.975 (CTAF) L





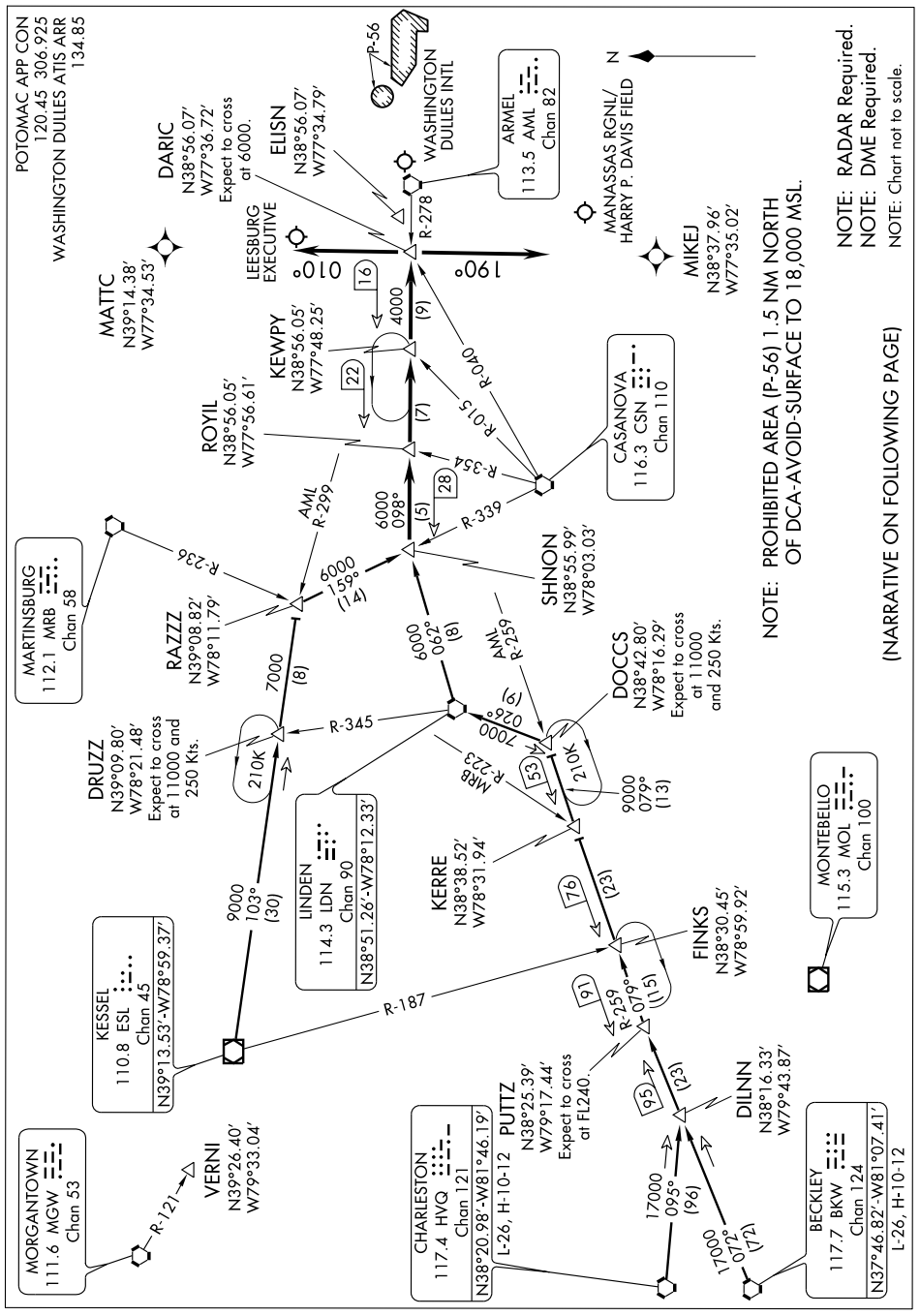


CATEGORY	A	B	C	D
LPV DA	640-1 258 (300-1)			
LNAV/VNAV DA	740-1¼ 358 (400-1¼)			
LNAV MDA	860-1 478 (500-1)		860-1¼ 478 (500-1¼)	860-1½ 478 (500-1½)
CIRCLING	860-1¼ 471 (500-1¼)		860-1½ 471 (500-1½)	1020-2 631 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

ROYIL TWO ARRIVAL

WASHINGTON, DC



ROYIL TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.ROYIL2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence . . . .

CHARLESTON TRANSITION (HVQ.ROYIL2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence . . . .

KESSEL TRANSITION (ESL.ROYIL2): From over ESL VOR/DME via ESL R-103 to RAZZZ INT, then via CSN R-339 to SHNON INT, thence . . . .

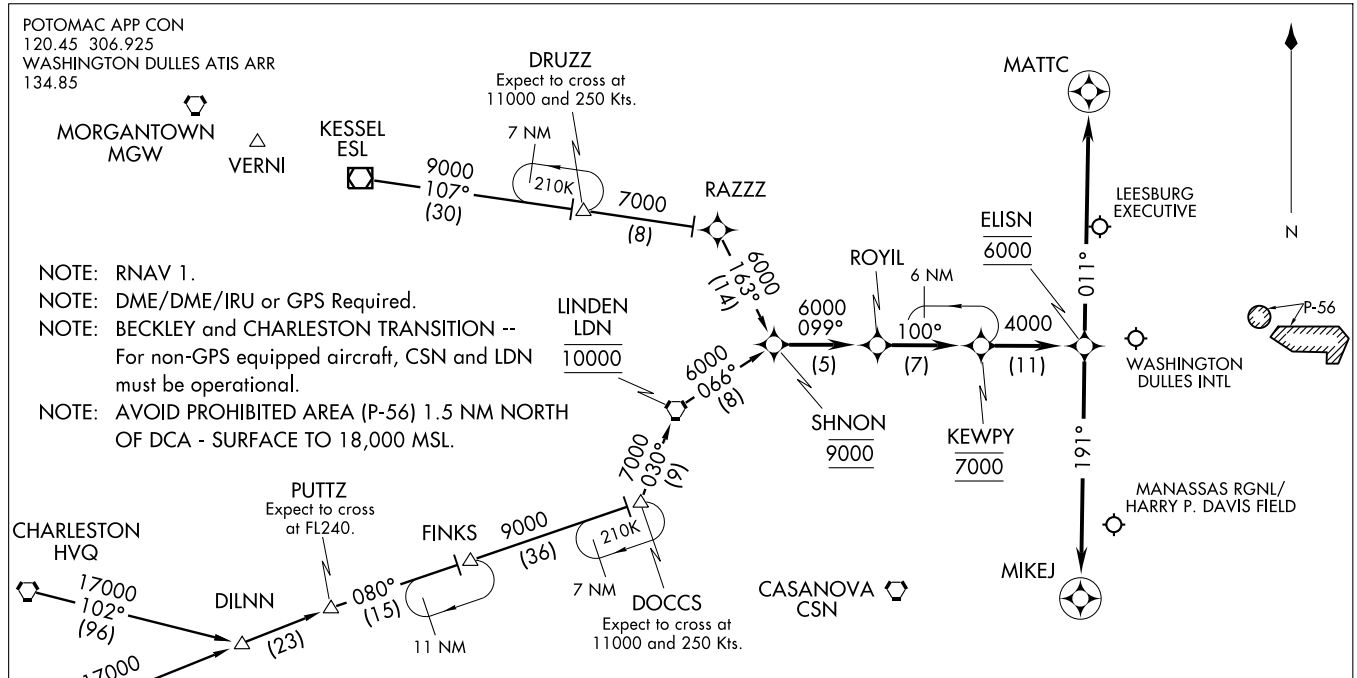
. . . . from over SHNON INT via AML R-278 to ROYIL INT, then via AML R-278 to KEWPY INT, then via AML R-278 to DARIC INT.

LANDING SOUTH (IAD ONLY): Depart DARIC heading 010° for vectors to final approach course.

LANDING NORTH (IAD ONLY): Depart DARIC heading 190° for vectors to final approach course.

NE-3, 14 JAN 2010 to 11 FEB 2010

SHNON TWO ARRIVAL (RNAV)



NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS Required.

NOTE: BECKLEY and CHARLESTON TRANSITION -- For non-GPS equipped aircraft, CSN and LDN must be operational.

NOTE: AVOID PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - SURFACE TO 18,000 MSL.

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.SHNON2)
CHARLESTON TRANSITION (HVQ.SHNON2)
KESSEL TRANSITION (ESL.SHNON2)
From over SHNON via 099° track to ROYIL, then via 100° track to KEWPY, then via 100° track to ELISN.

IAD RUNWAYS 1L/C/R TRANSITION: From ELISN via 191° track to MIKEJ.
IAD RUNWAYS 19L/C/R TRANSITION: From ELISN via 011° track to MATTC.

NOTE: Chart not to scale.

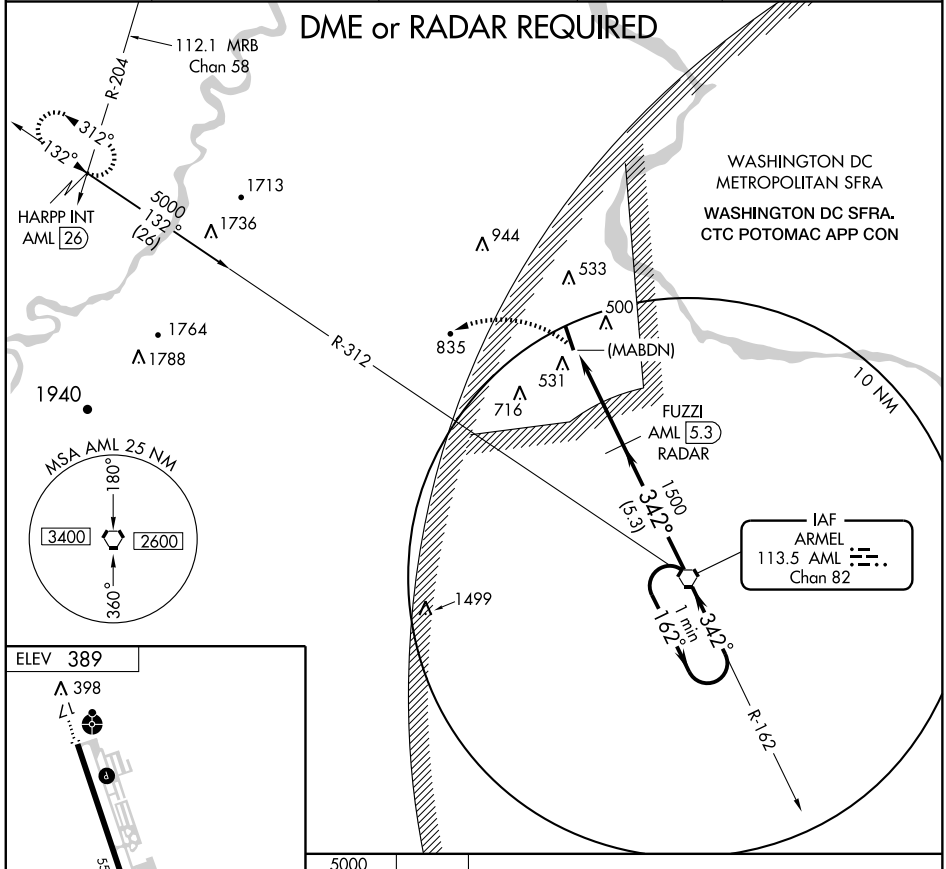
VORTAC AML 113.5 Chan 82	APP CRS 342°	Rwy ldg N/A TDZE N/A Apt Elev 389

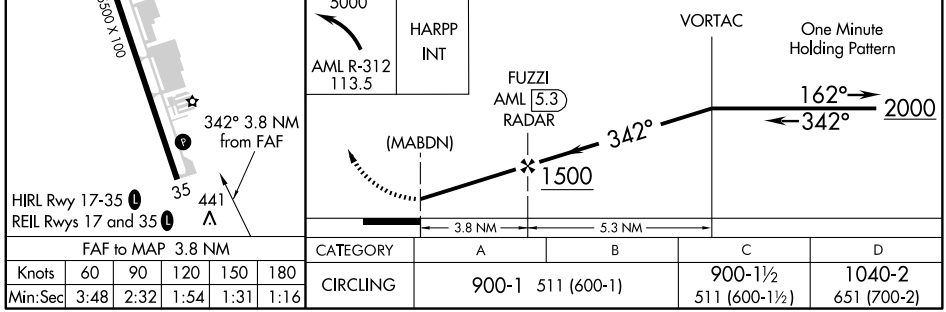
VOR or GPS-A

LEESBURG EXECUTIVE (JYO)

MISSED APPROACH: Climbing left turn to 5000 via R-312 to HARPP Int/AML 26 DME and hold.

AWOS-3	POTOMAC APP CON		LEESBURG RADIO	CLNC DEL	UNICOM
125.225	126.1	338.25	122.6	118.55	122.975 (CTAF) L





FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

CATEGORY	A	B	C	D
CIRCLING	900-1 511 (600-1)		900-1½ 511 (600-1½)	1040-2 651 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC I-LKU	APP CRS	Rwy ldg	4300
108.55	271°	TDZE	493
		Apt Elev	493

LOC/DME RWY 27

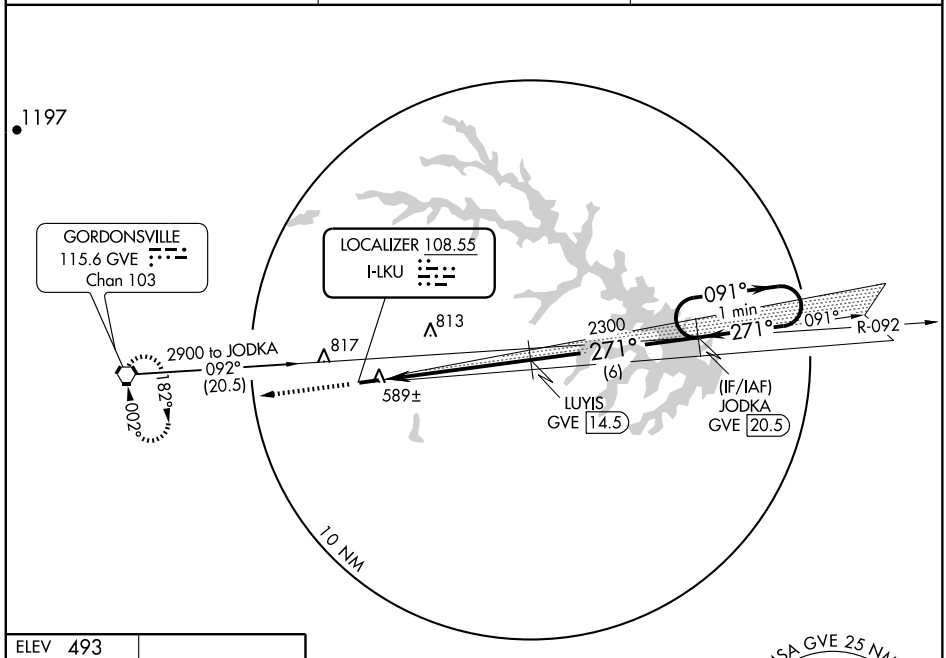
LOUISA COUNTY/FREEMAN FIELD (LKU)

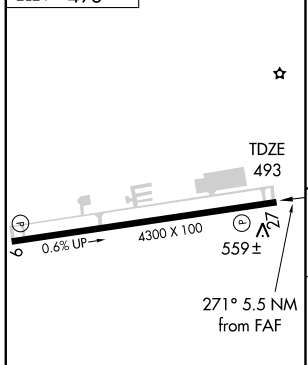
Circling NA N of Rwy 09-27. When local altimeter setting not received, use Orange altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA. DME from GVE VORTAC, simultaneous reception of I-LKU and GVE DME required.

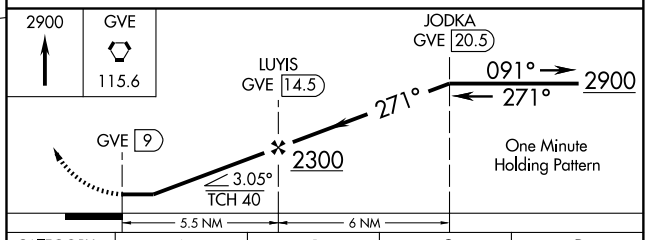
NA

MISSED APPROACH: Climb to 2900 direct GVE VORTAC and hold.

AWOS-3	POTOMAC APP CON	UNICOM
119.475	132.85 257.75	122.725 (CTAF) L







CATEGORY	A	B	C	D
S-27	840-1 347 (400-1)		NA	
CIRCLING	920-1 427 (500-1)	960-1 467 (500-1)	NA	

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

APP CRS	Rwy ldg	4300
271°	TDZE	493
	Apt Elev	493

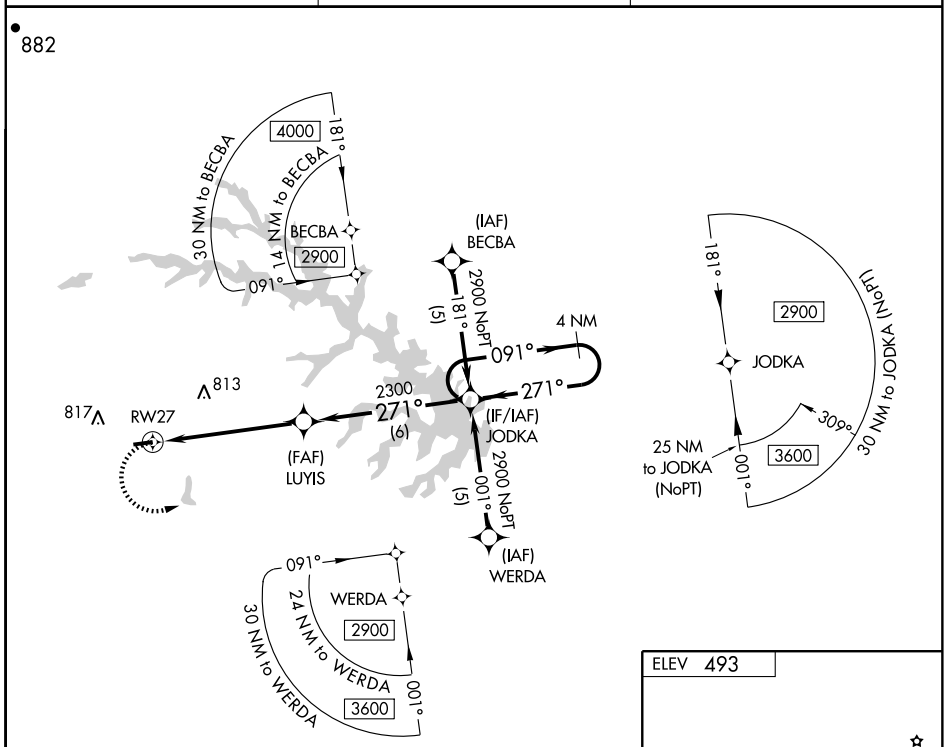
RNAV (GPS) RWY 27
LOUISA COUNTY/FREEMAN FIELD (LKU)

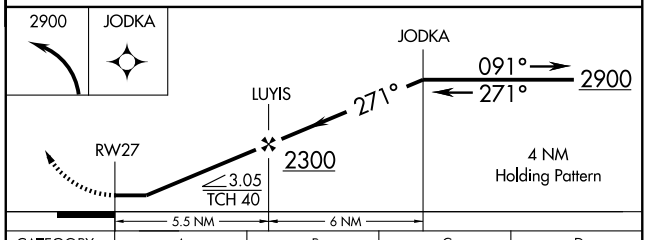
Circling NA N of Rwy 09-27. When local altimeter setting not received, use Orange altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2900 direct JODKA and hold.

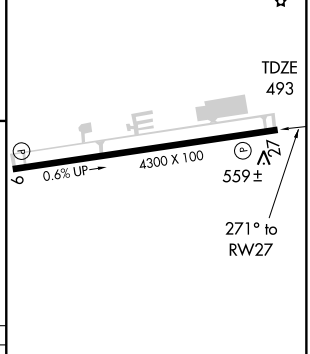
AWOS-3	POTOMAC APP CON	UNICOM
119.475	132.85 257.75	122.725 (CTAF) L

882





CATEGORY	A	B	C	D
LNAV MDA	920-1 427 (500-1)		NA	
CIRCLING	920-1 427 (500-1)	960-1 467 (500-1)	NA	



REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

NE-3. 14 JAN 2010 to 11 FEB 2010

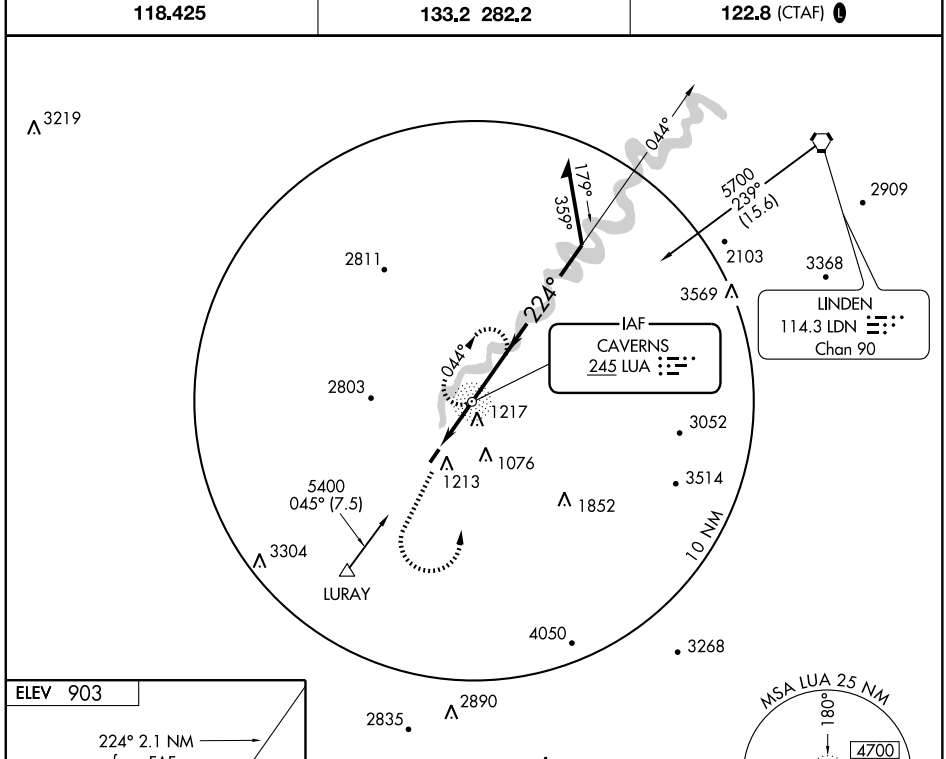
NDB LUA 245	APP CRS 224°	Rwy ldg N/A TDZE N/A Apt Elev 903

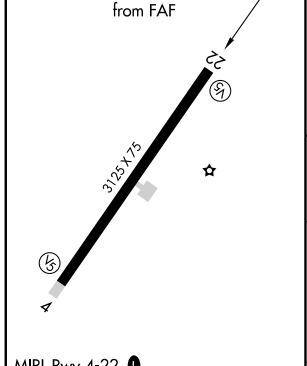
NDB-A
LURAY CAVERNS (W45)

Use Charlottesville altimeter setting; when not received, use Orange altimeter setting. Visibility reduction by helicopters NA.

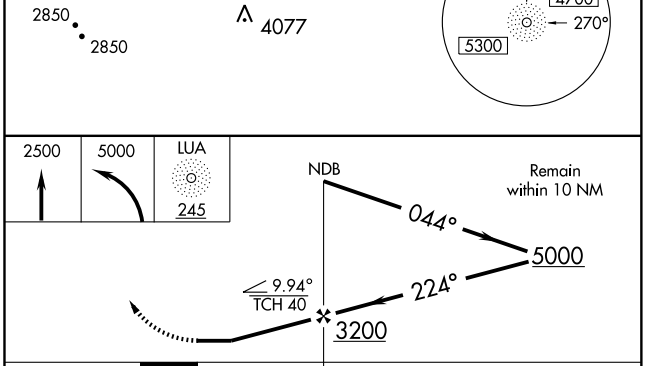
MISSED APPROACH: Climb to 2500 then climbing left turn to 5000 direct LUA NDB and hold, continue climb-in-hold to 5000.

CHARLOTTESVILLE ASOS	WASHINGTON CENTER	UNICOM
118.425	133.2 282.2	122.8 (CTAF) L





MIRL Rwy 4-22 L



FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

CATEGORY	A	B	C	D
CIRCLING	2360-1¼ 1457 (1500-1¼)	2360-1½ 1457 (1500-1½)	2360-3 1457 (1500-3)	NA

APP CRS	Rwy ldg	3125
230°	TDZE	903
	Apt Elev	903

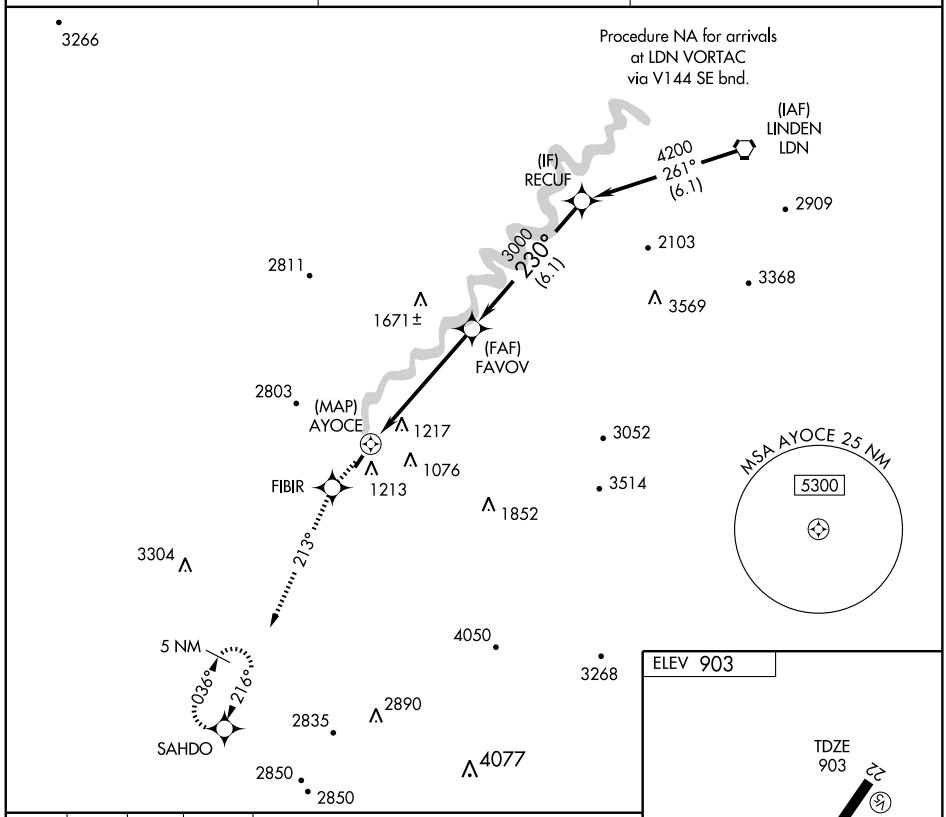
RNAV (GPS) RWY 22
LURAY CAVERNS (W45)

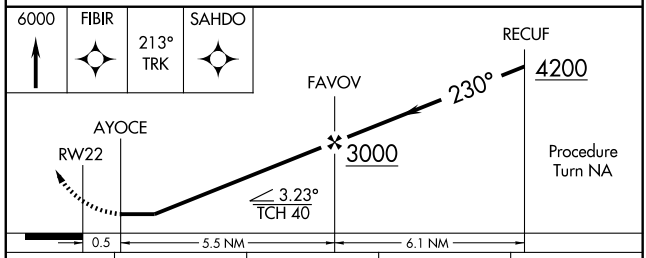
Use Charlottesville altimeter setting; when not received, use Orange altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

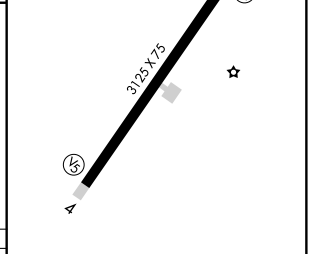
NA

MISSED APPROACH: Climb to 6000 direct FIBIR and via 213° track to SAHDO and hold, continue climb-and-hold to 6000.

CHARLOTTESVILLE ASOS	WASHINGTON CENTER	UNICOM
118.425	133.2 282.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	2280-1¼ 1377 (1400-1¼)	2280-1½ 1377 (1400-1½)	2280-3 1377 (1400-3)	NA
CIRCLING	2320-1¼ 1417 (1500-1¼)	2320-1½ 1417 (1500-1½)	2320-3 1417 (1500-3)	NA

MIRL Rwy 4-22 L

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC LDN 114.3 Chan 90	APP CRS 237°	Rwy ldg N/A TDZE N/A Apt Elev 903

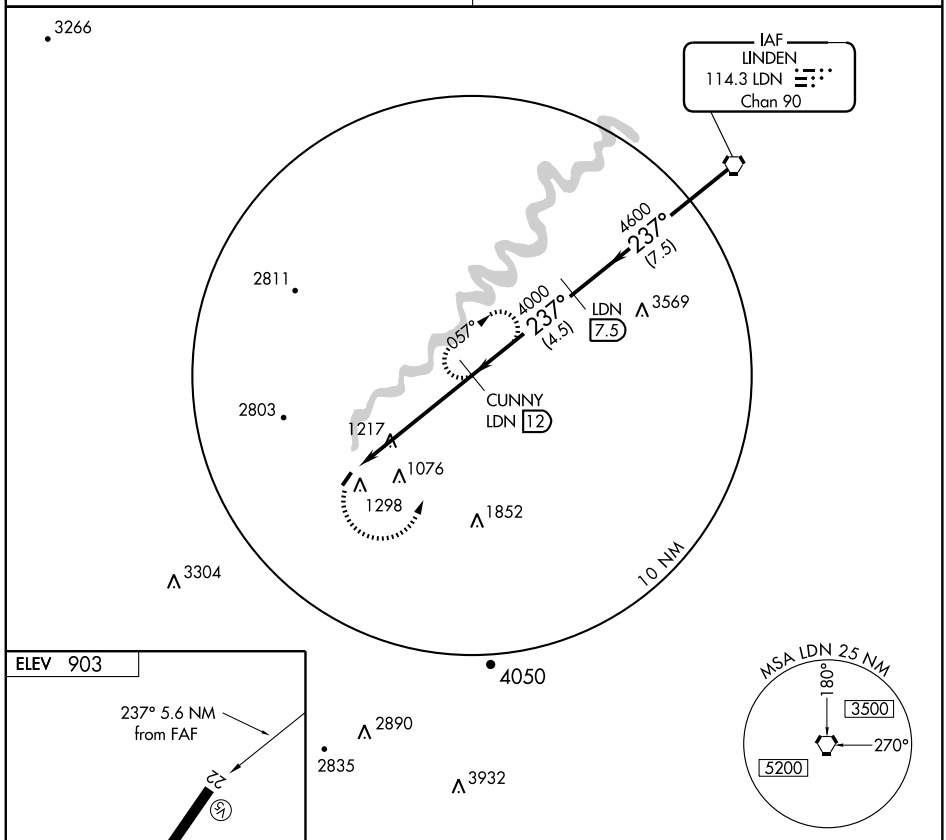
VOR/DME-B
LURAY CAVERNS (W45)

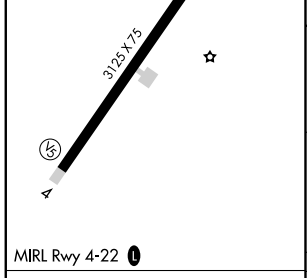
T
A NA

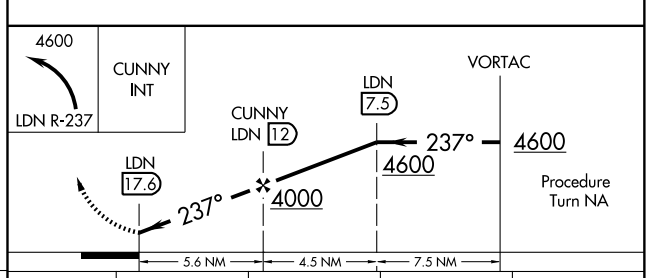
Use Charlottesville altimeter setting.

MISSED APPROACH: Climbing left turn to 4600 via LDN R-237 to CUNNY and hold.

WASHINGTON CENTER	UNICOM
133.2 282.2	122.8 (CTAF) L







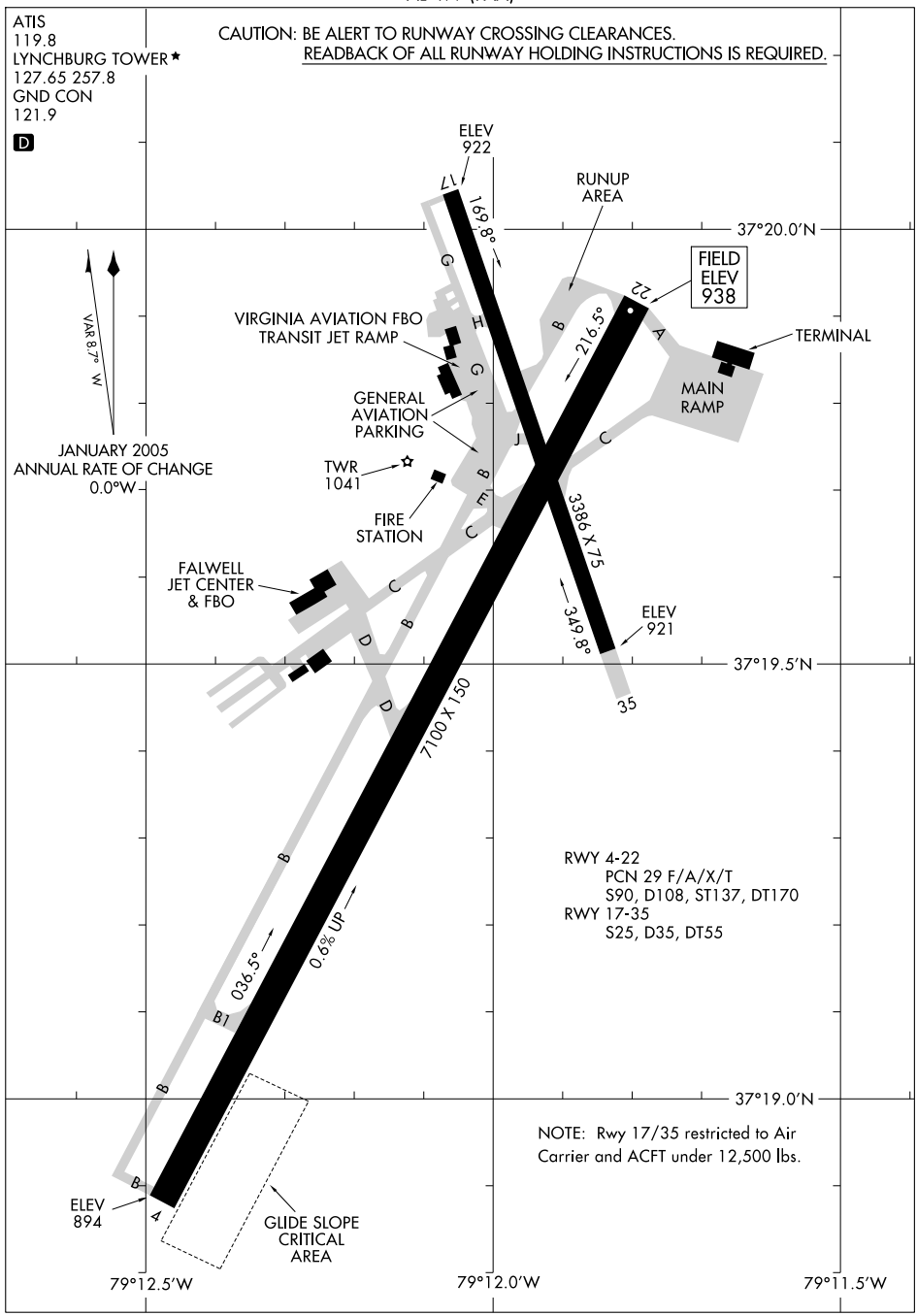
Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	2320-1¼ 1417 (1500-1¼)	2320-1½ 1417 (1500-1½)	2320-3 1417 (1500-3)	NA

NE-3. 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)
AL-499 (FAA)
LYNCHBURG, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

LOC I-LYH	APP CRS	Rwy ldg	6800
110.1	036°	TDZE	906
		Apt Elev	938

ILS or LOC RWY 4

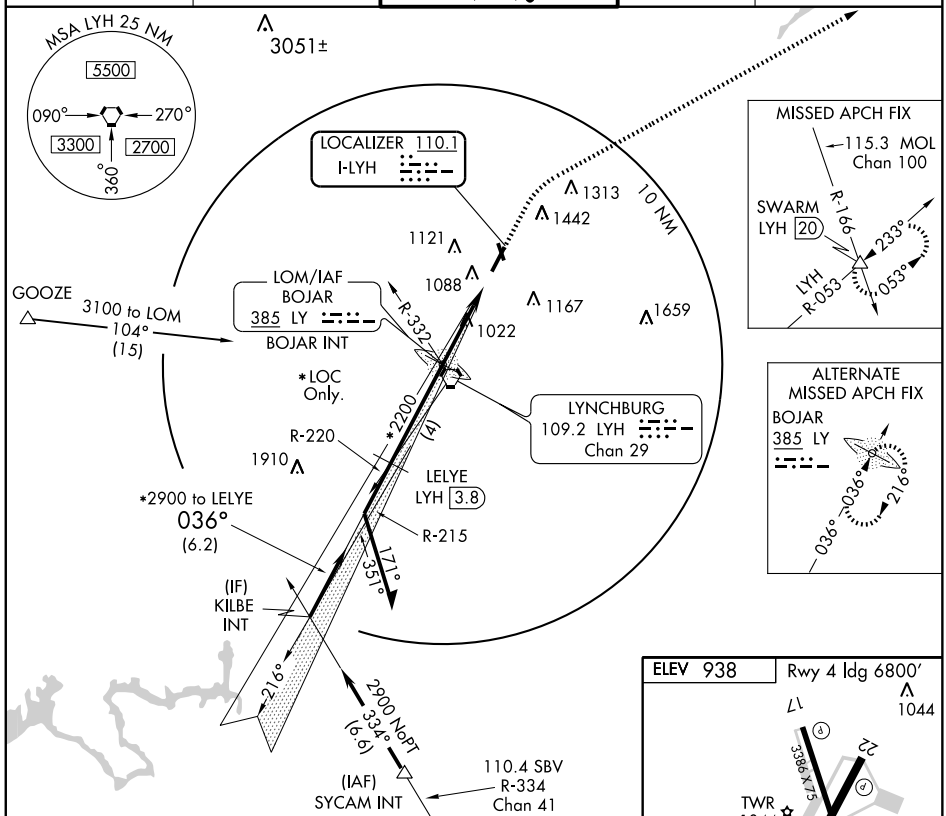
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

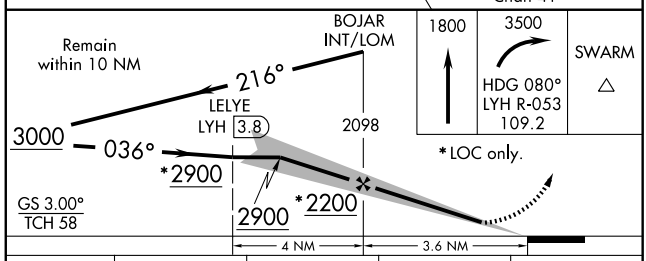
* DME REQUIRED
** RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1800, then climbing right turn to 3500 via heading 080° and LYH VORTAC R-053 to SWARM Int and hold.

ATIS	ROANOKE APP CON		LYNCHBURG TOWER ★		GND CON	UNICOM
119.8	135.0	254.32	127.65 (CTAF)	257.8	121.9	122.95





CATEGORY	A	B	C	D
S-ILS 4	**1106/24 200 (200-½)			
S-LOC 4	1320/24 414 (400-½)		1320/40 414 (400-¾)	
CIRCLING	1640-1 702 (800-1)	1700-1¼ 762 (800-1¼)	1800-2½ 862 (900-2½)	1800-2¾ 862 (900-2¾)

FAF to MAP 3.6 NM

Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 58205 W04A	APP CRS 036°	Rwy ldg 6800 TDZE 906 Apt Elev 938

RNAV (GPS) RWY 4

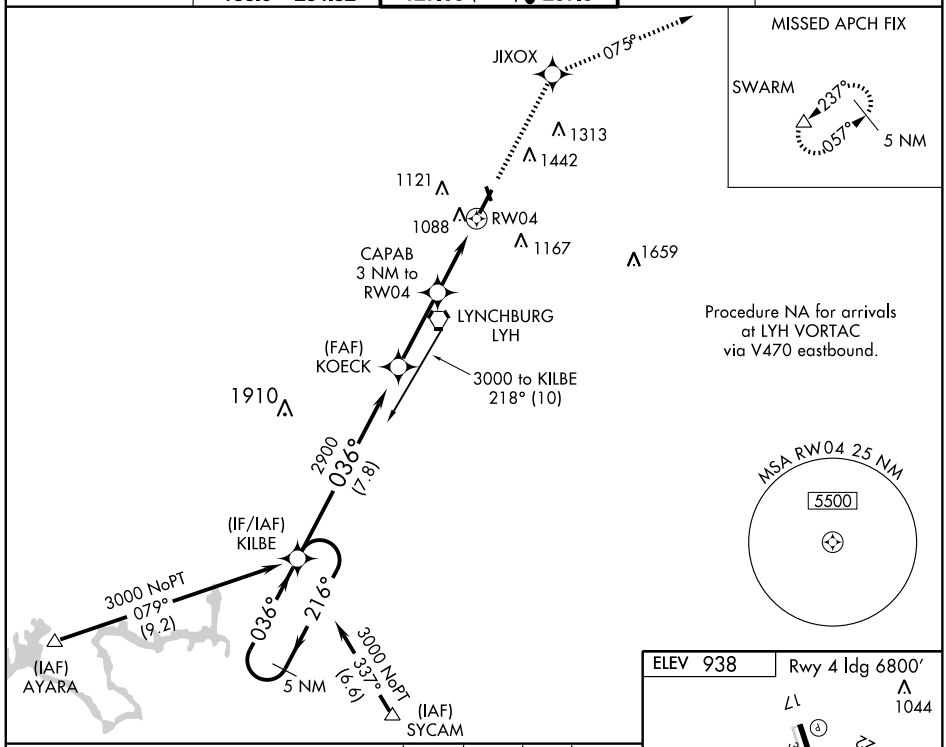
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

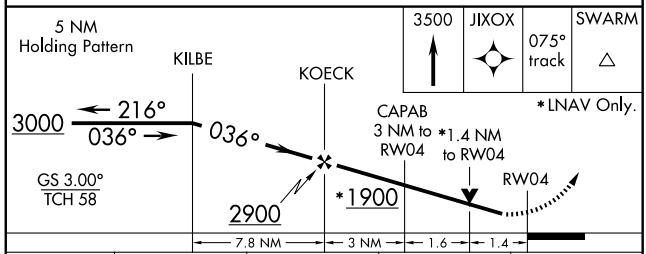
For inoperative MALSR, increase LNAV Cat A and B visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibilty reduction by helicopters NA.

MALSR

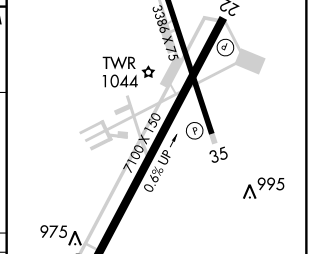
MISSED APPROACH: Climb to 3500 direct JIXOX and via 075° track to SWARM and hold.

ATIS	ROANOKE APP CON	LYNCHBURG TOWER ★	GND CON	UNICOM
119.8	135.0 254.32	127.65 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1176/40 270 (300-¾)			
LNAV/VNAV DA	1395/60 489 (500-1¼)			
LNAV MDA	1400/40 494 (500-¾)			1400/50 494 (500-1)
CIRCLING	1640-1 702 (800-1)	1700-1¼ 762 (800-1¼)	1800-2½ 862 (900-2½)	1800-2¾ 862 (900-2¾)



HIRL Rwy 4-22 L
MIRL Rwy 17-35
REIL Rwys 17,22 and 35

NE-3, 14 JAN 2010 to 11 FEB 2010

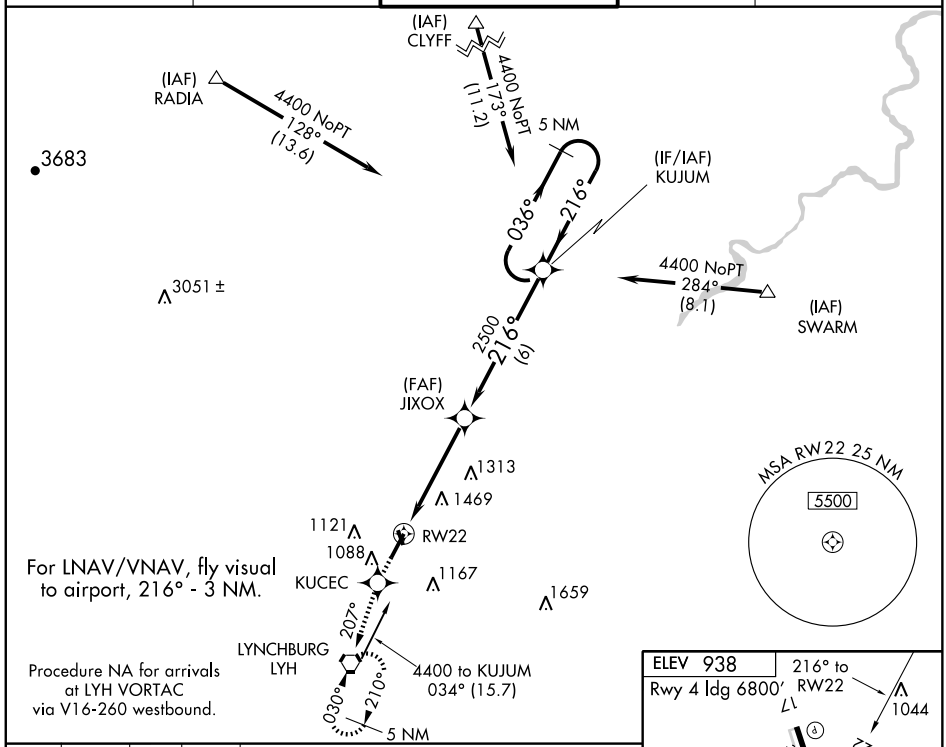
WAAS CH 97705 W22A	APP CRS 216°	Rwy ldg 7100 TDZE 938 Apt Elev 938

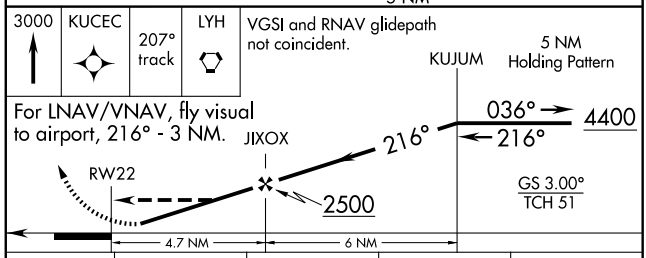
RNAV (GPS) RWY 22
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

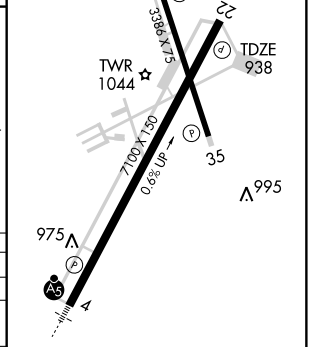
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibilty reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct KUCEC and via 207° track to LYH VORTAC and hold, continue climb-in hold to 3000.

ATIS	ROANOKE APP CON	LYNCHBURG TOWER ★	GND CON	UNICOM
119.8	135.0 254.32	127.65 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
LPV DA	1250-1 312 (400-1)			
LNAV/VNAV DA	1939-2 1001 (1100-2)		1939-3 1001 (1100-3)	
LNAV MDA	1720-1 782 (800-1)	1720-1 ¼ 782 (800-1¼)	1720-2 ¼ 782 (800-2 ¼)	1720-2 ½ 782 (800-2½)
CIRCLING	1720-1 782 (800-1)	1720-1 ¼ 782 (800-1¼)	1800-2½ 862 (900-2½)	1800-2 ¾ 862 (900-2¾)

HIRL Rwy 4-22 L
MIRL Rwy 17-35
REIL Rwys 17,22 and 35

NE-3. 14 JAN 2010 to 11 FEB 2010

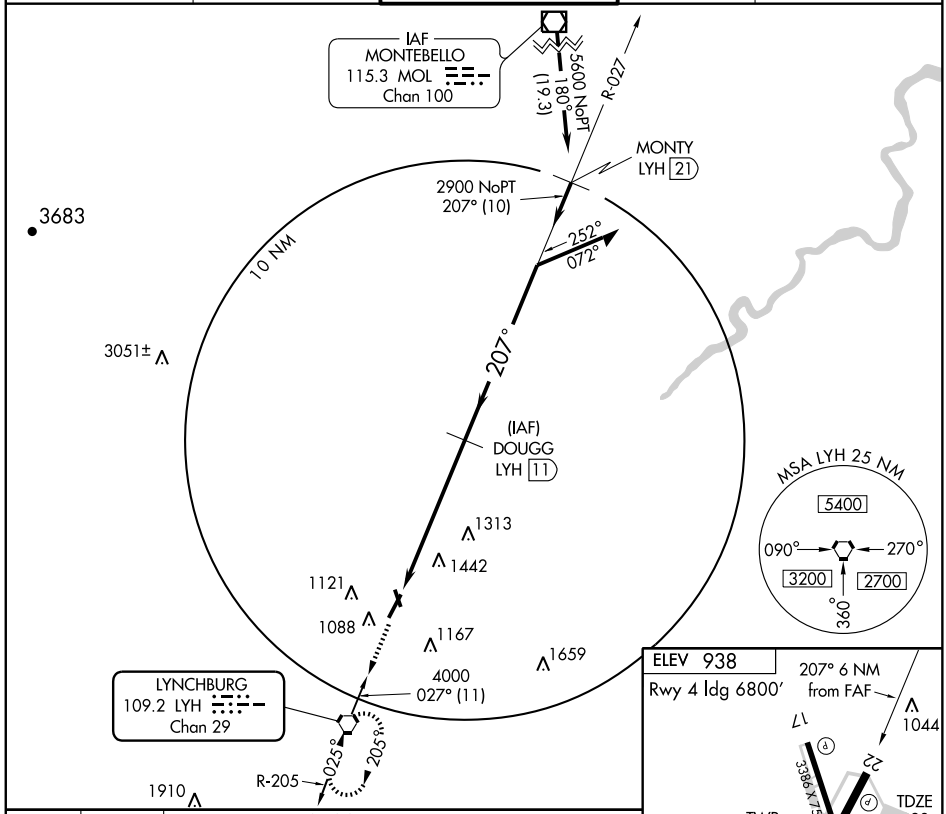
VORTAC LYH 109.2 Chan 29	APP CRS 207°	Rwy ldg 7100 TDZE 938 Apt Elev 938

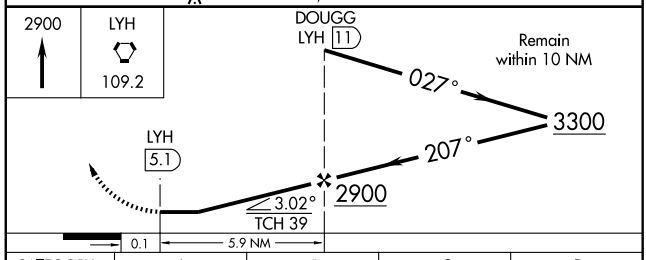
VOR/DME RWY 22

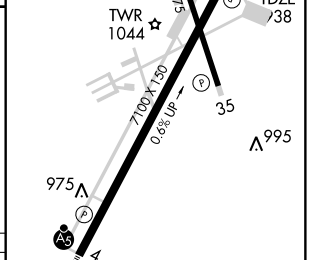
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

MISSED APPROACH: Climb to 2900 direct LYH VORTAC and hold.

ATIS	ROANOKE APP CON	LYNCHBURG TOWER ★	GND CON	UNICOM
119.8	135.0 254.32	127.65 (CTAF) L 257.8	121.9	122.95







HIRL Rwy 4-22 L
MIRL Rwy 17-35
REIL Rwys 17,22 and 35

CATEGORY	A	B	C	D
S-22	1740-1 802 (900-1)	1740-1¼ 802 (900-1¼)	1740-2¼ 802 (900-2¼)	1740-2½ 802 (900-2½)
CIRCLING	1740-1 802 (900-1)	1740-1¼ 802 (900-1¼)	1800-2½ 862 (900-2½)	1800-2¾ 862 (900-2¾)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC LYH	APP CRS	Rwy ldg	6800
109.2	026°	TDZE	906
Chan 29		Apt Elev	938

VOR RWY 4

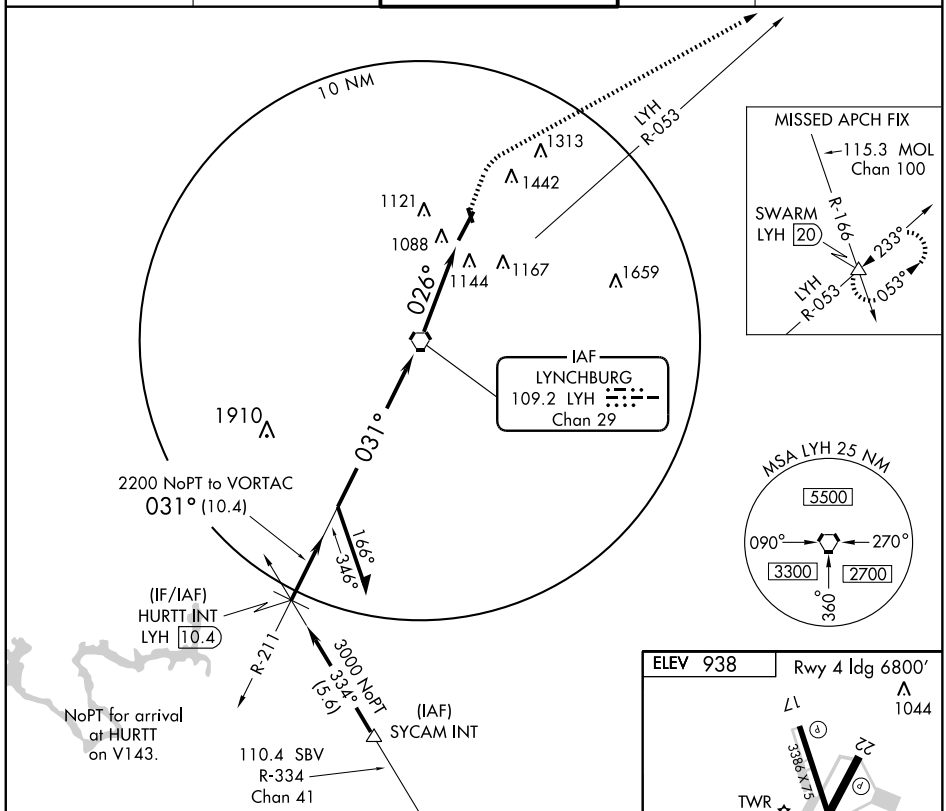
LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)

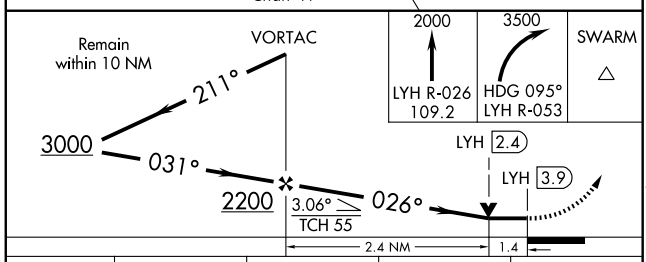
For inoperative MALSR, increase S-4 Cat A and B visibility to RVR 5000. Visibility reduction by helicopters NA.

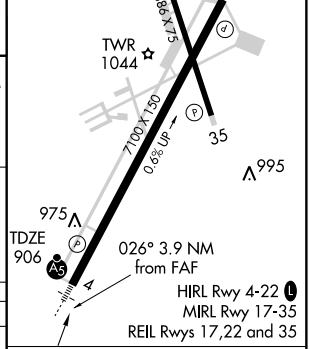
MALSR

MISSED APPROACH: Climb to 2000 via LYH VORTAC R-026 then climbing right turn to 3500 via heading 095° and LYH VORTAC R-053 to SWARM Int and hold.

ATIS	ROANOKE APP CON	LYNCHBURG TOWER ★	GND CON	UNICOM
119.8	135.0 254.32	127.65 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-4	1400/40 494 (500-¾)			1400/50 494 (500-1)
CIRCLING	1640-1 702 (800-1)	1700-1¼ 762 (800-1¼)	1800-2½ 862 (900-2½)	1800-2¾ 862 (900-2¾)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	2932
283°	TDZE	939
	Apt Elev	939

RNAV (GPS) RWY 28

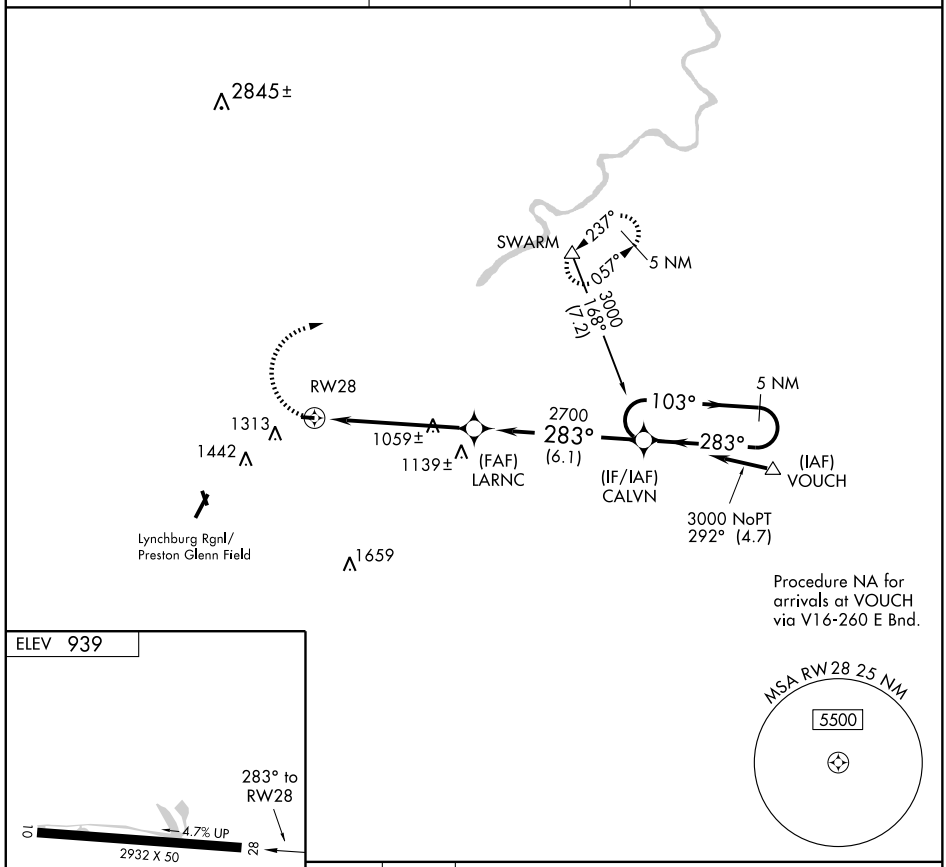
LYNCHBURG/ FALWELL (W24)

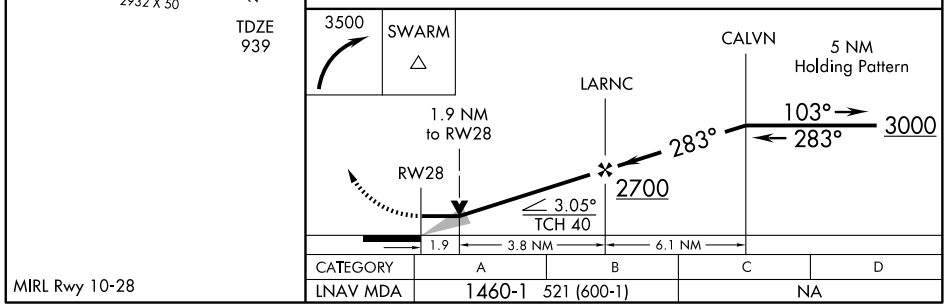
Use Lynchburg Rgnl/Preston Glenn Field altimeter setting, if not received use Farmville altimeter setting and increase all MDAs 160 feet. VDP NA when using Farmville altimeter setting. Procedure NA at night. DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climbing right turn to 3500 direct SWARM and hold.

LYNCHBURG RGNL/PRESTON GLENN FIELD ASOS	ROANOKE APP CON	UNICOM
119.8	135.0 254.32	123.0 (CTAF)





CATEGORY	A	B	C	D
LNAV MDA	1460-1 521 (600-1)		NA	

MIRL Rwy 10-28

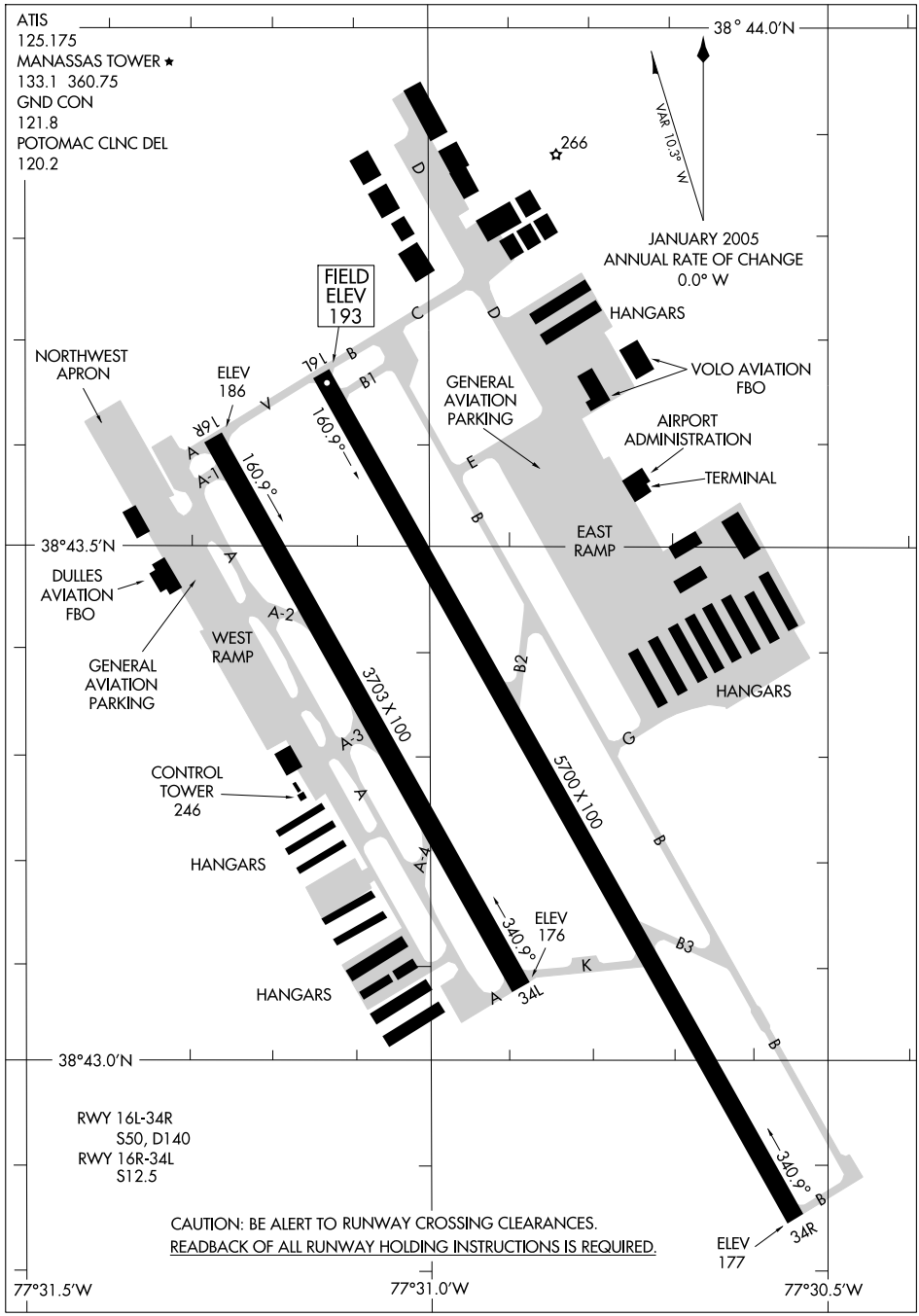
NE-3, 14 JAN 2010 to 11 FEB 2010

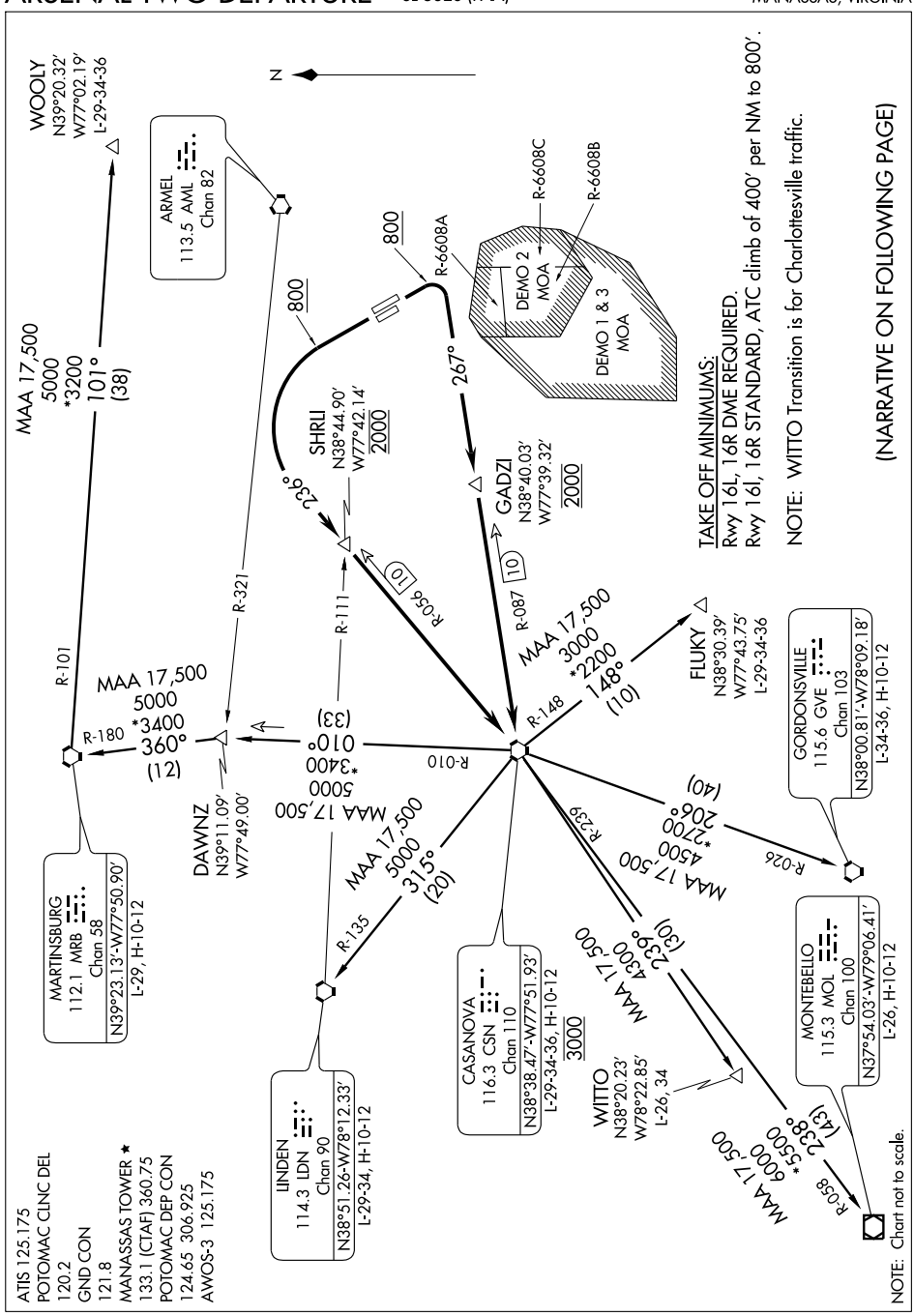
AIRPORT DIAGRAM

MANASSAS RNGL/HARRY P. DAVIS FIELD (HEF)

AL-5326 (FAA)

MANASSAS, VIRGINIA





TAKE OFF MINIMUMS:
Rwy 16L, 16R DME REQUIRED.
Rwy 16l, 16R STANDARD, ATC climb of 400' per NM to 800'.

NOTE: WITTO Transition is for Charlottesville traffic.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 34L: Climb heading 341° to 800′, then climbing left turn to 2000′ to intercept CSN R-056 to CSN VORTAC. Maintain 2000′ until crossing SHRLI INT/CSN VORTAC 10 DME. Thence. . . .
TAKE-OFF RWY 34R: Climb heading 341° to 800′, then climbing left turn to 2000′ to intercept CSN R-056 to CSN VORTAC. Maintain 2000′ until crossing SHRLI INT/CSN VORTAC 10 DME. Thence. . . .
TAKE-OFF RWY 16L: Climb heading 161° to 800′, then climbing right turn to 2000′ to intercept CSN R-087 to CSN VORTAC. Maintain 2000′ until crossing GADZI INT/CSN VORTAC 10 DME. Thence. . . .
TAKE-OFF RWY 16R: Climb heading 161° to 800′, then climbing right turn to 2000′ to intercept CSN R-087 to CSN VORTAC. Maintain 2000′ until crossing GADZI INT/CSN VORTAC 10 DME. Thence. . . .

. . . . climb and maintain 3000′. Cross CSN VORTAC at 3000′.

FLUKY TRANSITION (ARSNL2.FLUKY): From over CSN VORTAC via CSN R-148 to FLUKY INT.
GORDONSVILLE TRANSITION (ARSNL2.GVE): From over CSN VORTAC via CSN R-206 and GVE R-026 to GVE VORTAC.
LINDEN TRANSITION (ARSNL2.LDN): From over CSN VORTAC via CSN R-315 and LDN R-135 to LDN VORTAC.
MARTINSBURG TRANSITION (ARSNL2.MRB): From over CSN VORTAC via CSN R-010 to DAWNZ INT, then via MRB R-180 to MRB VORTAC.
MONTEBELLO TRANSITION (ARSNL2.MOL): From over CSN VORTAC via CSN R-239 and MOL R-058 to MOL VOR/DME.
WITTO TRANSITION (ARSNL2WITTO): From over CSN VORTAC via CSN R-239 to WITTO INT.
WOOLY TRANSITION (ARSNL2.WOOLY): From over CSN VORTAC via CSN R-010 to DAWNZ INT, then via MRB R-180 to MRB VORTAC, then via MRB R-101 to WOOLY INT.

TAKE-OFF OBSTACLES:

NOTE: Rwy 16R: Terrain 64′ from DER, 136′ right of centerline, 179′ MSL. Numerous trees beginning 242′ from DER, 53′ right of centerline up to 100′ AGL/279′ MSL. Vehicle on road 886′ from DER, 463′ right of centerline, 15′ AGL/214′ MSL. Terrain 33′ from DER, 427′ left of centerline, 179′ MSL. Numerous trees beginning 688′ from DER, 40′ left of centerline, up to 100′ AGL/279′ MSL.

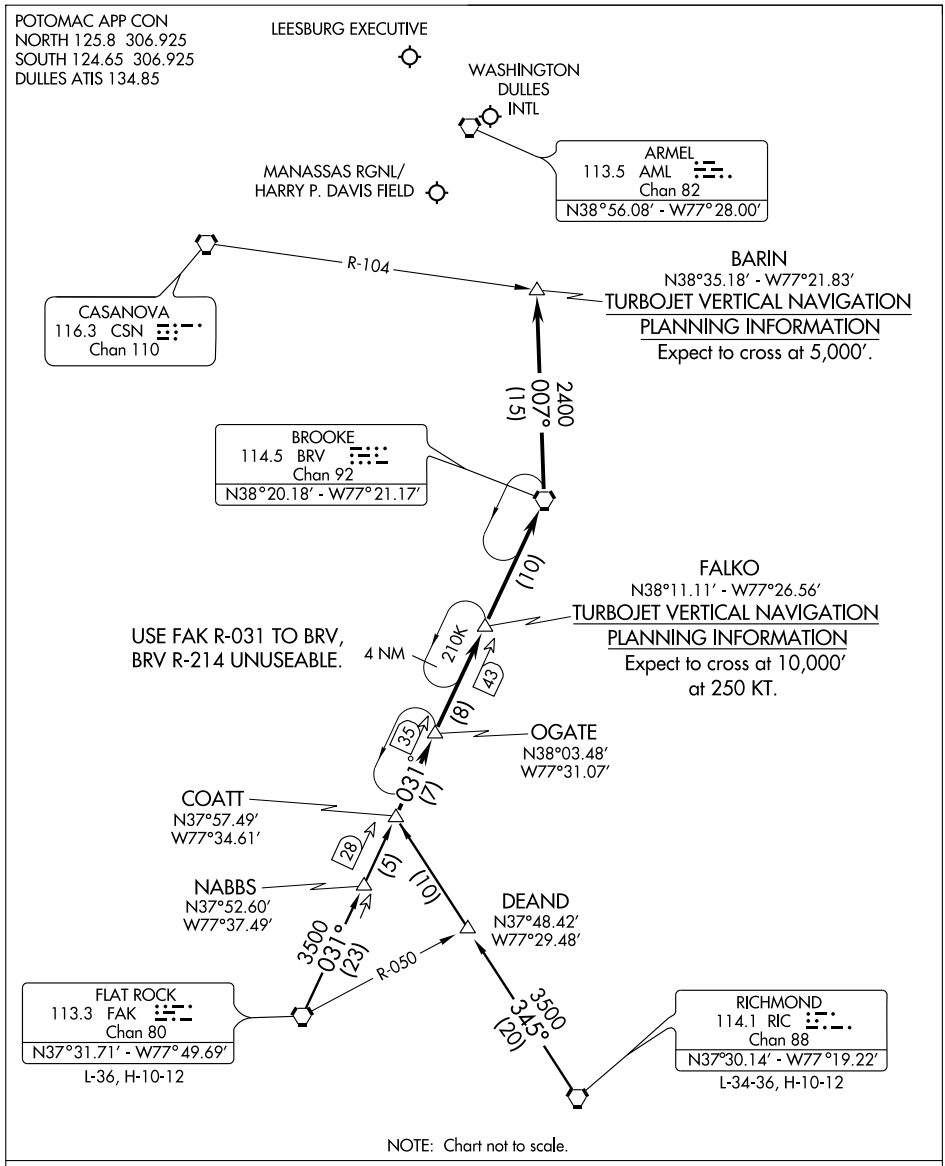
NOTE: Rwy 16L: Terrain 56′ from DER, 177′ left of centerline, 179′ MSL. Numerous trees beginning 1,911′ from DER, 158′ left of centerline, up to 83′ AGL/292′ MSL. Terrain 87′ from DER, 386′ right of centerline, 179′ MSL. Numerous trees beginning 2,559′ from DER, 29′ right of centerline up to 100′ AGL/273′ MSL.

NOTE: Rwy 34R: Sign 70′ from DER, 91′ right of centerline, 6′ AGL/196′ MSL. Terrain beginning 23′ from DER, 222′ right of centerline, up to 199′ MSL. Vehicle on road 198′ from DER, 9′ right of centerline, 15′ AGL/214′ MSL. Numerous trees beginning 1,860′ from DER, 828′ right of centerline, up to 70′ AGL/280′ MSL. Numerous trees beginning 2,875′ from DER, 484′ left of centerline, up to 27′ AGL/266′ MSL.

NOTE: Rwy 34L: Terrain 107′ from DER, 409′ right of centerline, 189′ MSL. Numerous trees beginning 2,802′ from DER, 251′ right of centerline, up to 27′ AGL/266′ MSL. Terrain 76′ from DER, 154′ left of centerline, 189′ MSL. Vehicle on road 366′ from DER, 19′ left of centerline, 15′ AGL/204′ MSL. Numerous trees beginning 1,603′ from DER, 249′ left of centerline, up to 43′ AGL/252′ MSL. Tower 3,398 from DER, 1,102′ left of centerline, 68′ AGL/274′ MSL.

COATT FOUR ARRIVAL

WASHINGTON, DC



NOTE: Chart not to scale.

FLAT ROCK TRANSITION (FAK.COATT4): From over FAK VORTAC via FAK R-031 to COATT INT. Thence . . . .

RICHMOND TRANSITION (RIC.COATT4): From over RIC VORTAC via RIC R-345 to COATT INT. Thence . . . .

. . . . From over COATT INT via FAK R-031 to BRV VORTAC, then from over BRV VORTAC via BRV R-007 to BARIN INT. Expect radar vectors to final approach course after BARIN INT.

NE-3, 14 JAN 2010 to 11 FEB 2010

LOC I-HEF	APP CRS	Rwy ldg	5700
109.1	163°	TDZE	192
		Apt Elev	192

ILS or LOC RWY 16L

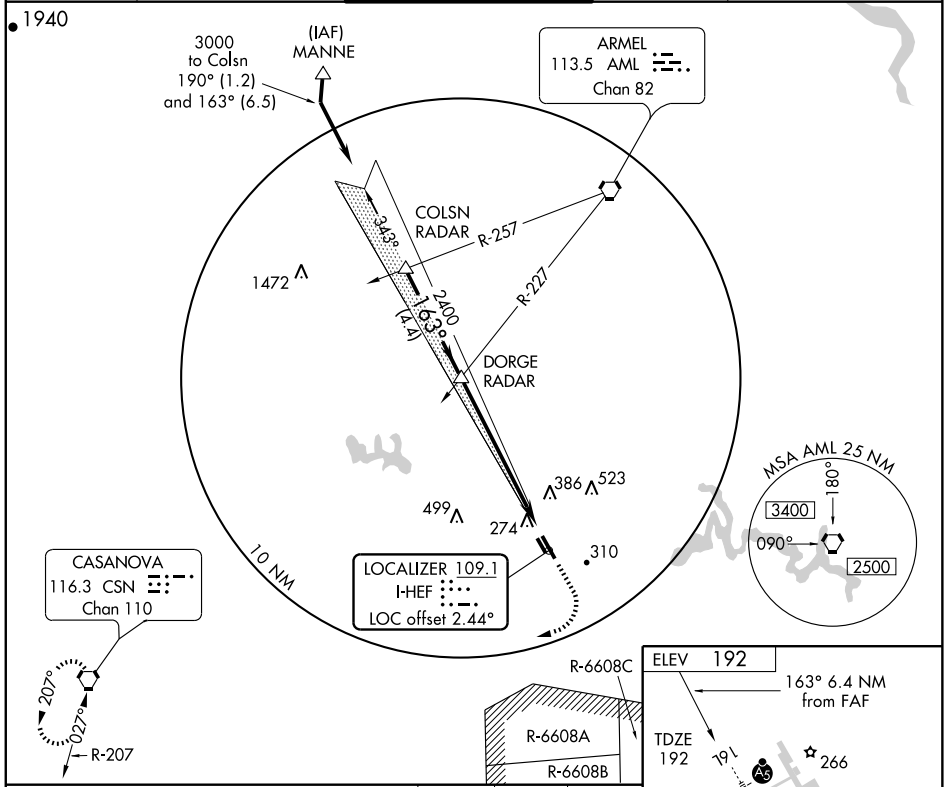
MANASSAS RGNL / HARRY P. DAVIS FIELD (HEF)

Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 600, then climbing right turn to 3000 direct CSN VORTAC and hold.

ATIS	POTOMAC APP CON	MANASSAS TOWER ★	GND CON	POTOMAC CLNC DEL
125.175	124.65 306.925	133.1 (CTAF) L 360.75	121.8	120.2



CATEGORY	A	B	C	D
S-ILS 16L	442-¾ 250 (300-¾)		492-1 300 (300-1)	
S-LOC 16L	800-1 608 (700-1)		800-1¾ 608 (700-1¾)	800-2 608 (700-2)
CIRCLING	800-1 608 (700-1)		800-1¾ 608 (700-1¾)	800-2 608 (700-2)

FAF to MAP 6.4 NM

Knots	60	90	120	150	180
Min:Sec	6:24	4:16	3:12	2:34	2:08

WAAS CH 70302 W16A	APP CRS 161°	Rwy ldg 5700 TDZE 192 Apt Elev 192

RNAV (GPS) RWY 16L

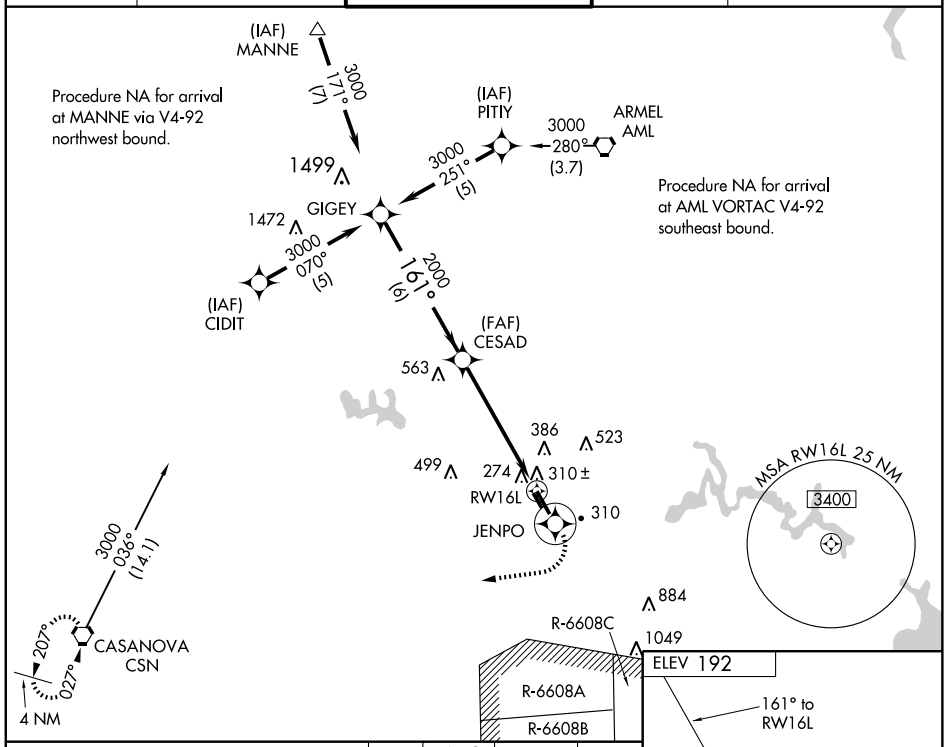
MANASSAS RGNL / HARRY P. DAVIS FIELD (HEF)

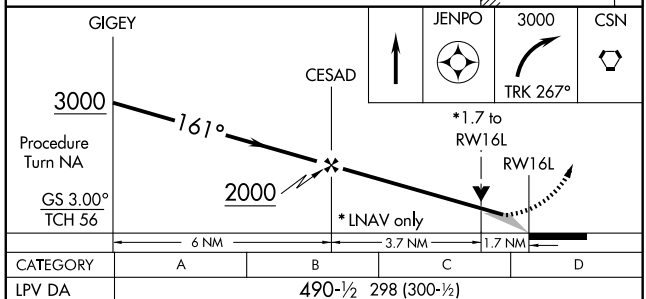
BARO-VNAV NA below -15°C (5°F).
DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LPV DA vis to 1 mile all Cats.

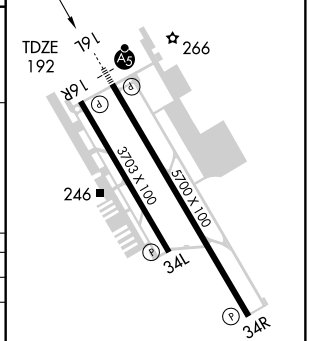
MALSR A5

MISSED APPROACH: Climb direct JENPO then climbing right turn to 3000 via 267° track to CSN VORTAC and hold.

ATIS	POTOMAC APP CON	MANASSAS TOWER *	GND CON	POTOMAC CLNC DEL
125.175	124.65 306.925	133.1 (CTAF) L 360.75	121.8	120.2







CATEGORY	A	B	C	D
LPV DA	490-½ 298 (300-½)			
LNAV/ VNAV DA	720-1¼ 528 (600-1¼)			
LNAV MDA	780-½ 588 (600-½)		780-1 588 (600-1)	780-1¼ 588 (600-1¼)
CIRCLING	780-1 588 (600-1)		780-1½ 588 (600-1½)	780-2 588 (600-2)

HIRL Rwy 16L-34R L
MIRL Rwy 16R-34L L
REIL All Rwys L

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APP CRS	Rwy ldg	3703
161°	TDZE	185
	Apt Elev	192

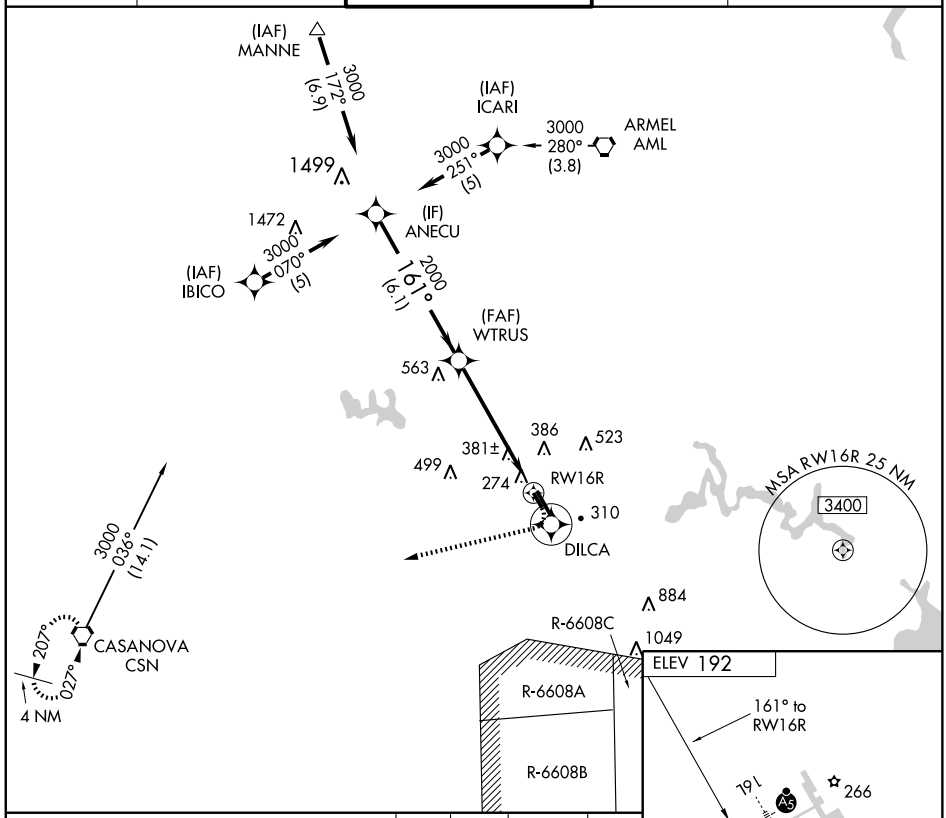
RNAV (GPS) RWY 16R

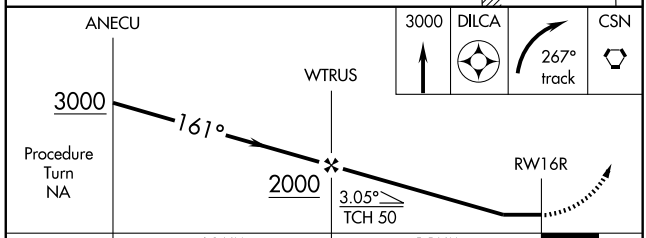
MANASSAS RGNL / HARRY P. DAVIS FIELD (HEF)

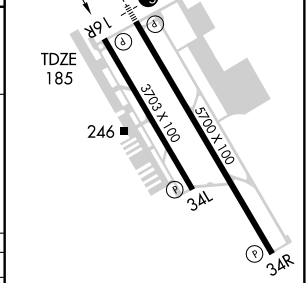
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct DILCA WP and right turn via 267° track to CSN VORTAC and hold.

ATIS	POTOMAC APP CON	MANASSAS TOWER ★	GND CON	POTOMAC CLNC DEL
125.175	124.65 306.925	133.1 (CTAF) L 360.75	121.8	120.2







CATEGORY	A	B	C	D
LNAV MDA	780-1 595 (600-1)		780-1½ 595 (600-1½)	780-1¾ 595 (600-1¾)
CIRCLING	780-1 588 (600-1)		780-1½ 588 (600-1½)	780-2 588 (600-2)

HIRL Rwy 16L-34R L
MIRL Rwy 16R-34L L
REIL All Rwys L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5700
326°	TDZE	177
	Apt Elev	192

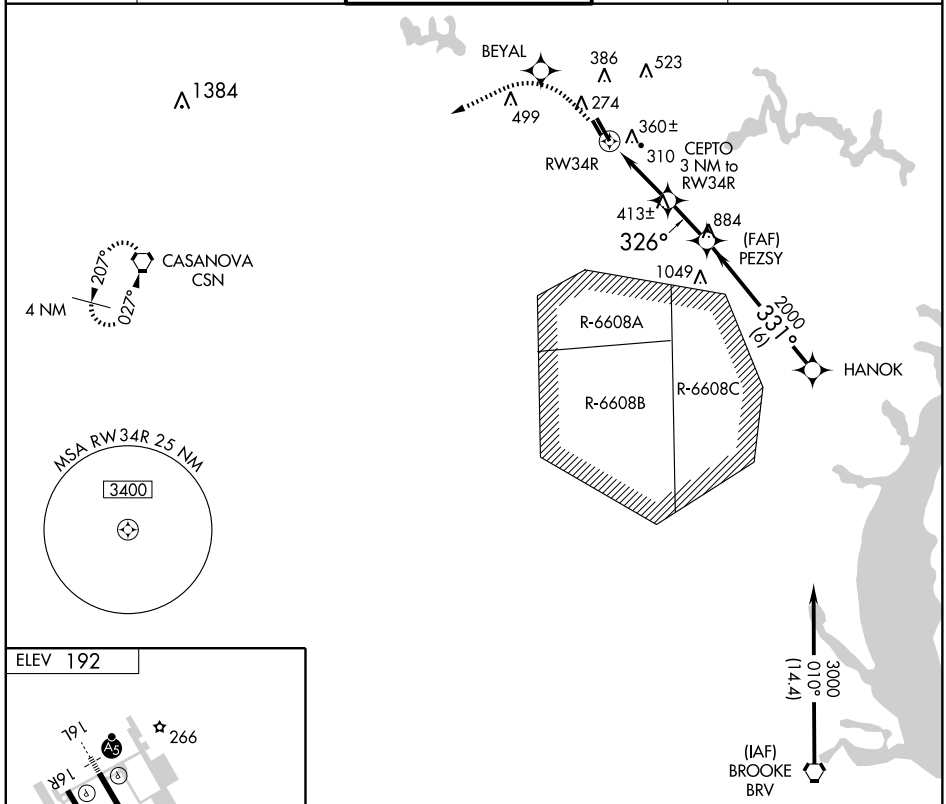
RNAV (GPS) RWY 34R
MANASSAS RGNL / HARRY P. DAVIS FIELD (HEF)

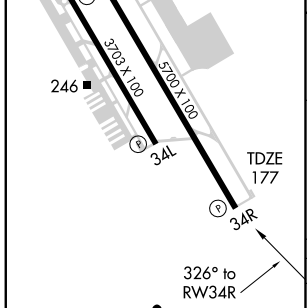
NA

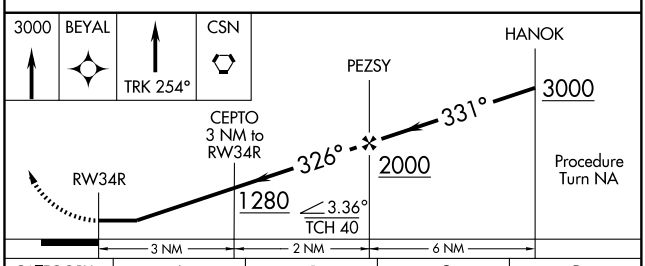
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct BEYAL WP and via 254° track to CSN VORTAC and hold.

ATIS	POTOMAC APP CON	MANASSAS TOWER ★	GND CON	POTOMAC CLNC DEL
125.175	124.65 306.925	133.1 (CTAF) L 360.75	121.8	120.2





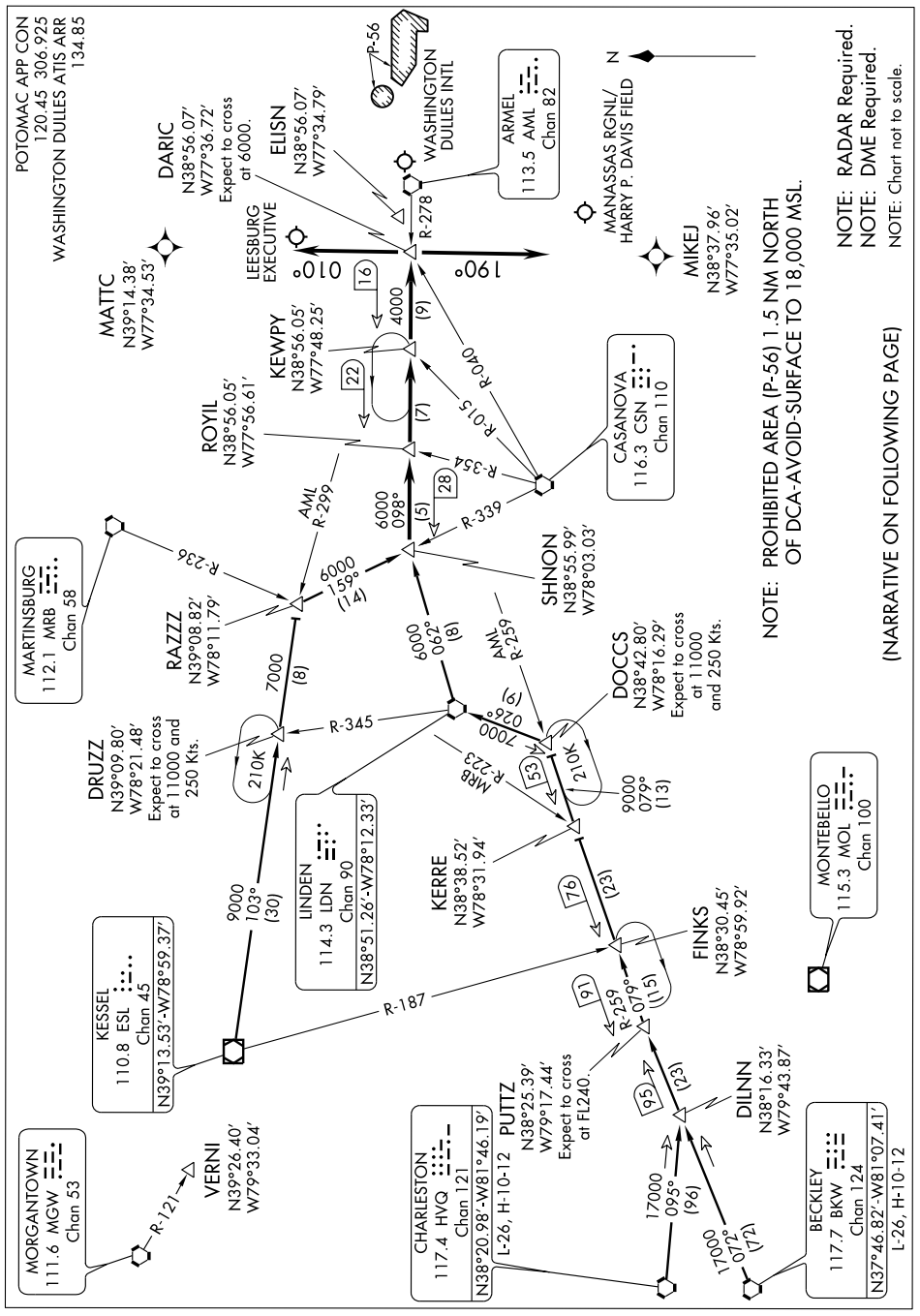


HIRL Rwy 16L-34R L
MIRL Rwy 16R-34L L
REIL All Rwys L

CATEGORY	A	B	C	D
LNAV MDA	620-1 443 (500-1)		620-1¼ 443 (500-1¼)	620-1½ 443 (500-1½)
CIRCLING	700-1 508 (600-1)		720-1½ 528 (600-1½)	760-2 568 (600-2)

ROYIL TWO ARRIVAL

WASHINGTON, DC



ROYIL TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.ROYIL2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence . . . .

CHARLESTON TRANSITION (HVQ.ROYIL2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence . . . .

KESSEL TRANSITION (ESL.ROYIL2): From over ESL VOR/DME via ESL R-103 to RAZZZ INT, then via CSN R-339 to SHNON INT, thence . . . .

. . . . from over SHNON INT via AML R-278 to ROYIL INT, then via AML R-278 to KEWPY INT, then via AML R-278 to DARIC INT.

LANDING SOUTH (IAD ONLY): Depart DARIC heading 010° for vectors to final approach course.

LANDING NORTH (IAD ONLY): Depart DARIC heading 190° for vectors to final approach course.

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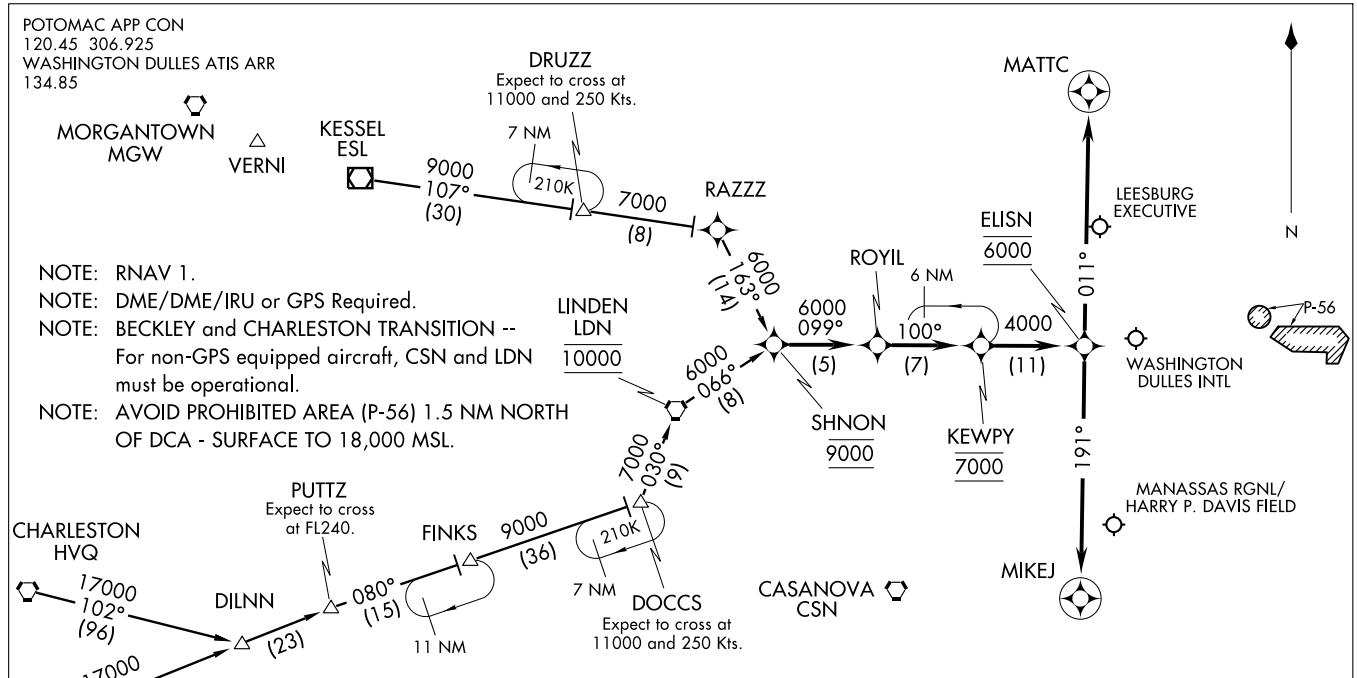
SHNON TWO ARRIVAL (RNAV)



NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS Required.

NOTE: BECKLEY and CHARLESTON TRANSITION -- For non-GPS equipped aircraft, CSN and LDN must be operational.

NOTE: AVOID PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - SURFACE TO 18,000 MSL.

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.SHNON2)
CHARLESTON TRANSITION (HVQ.SHNON2)
KESSEL TRANSITION (ESL.SHNON2)
From over SHNON via 099° track to ROYIL, then via 100° track to KEWPY, then via 100° track to ELISN.

IAD RUNWAYS 1L/C/R TRANSITION: From ELISN via 191° track to MIKEJ.
IAD RUNWAYS 19L/C/R TRANSITION: From ELISN via 011° track to MATTC.

NOTE: Chart not to scale.

LOC I-MKJ	APP CRS	Rwy ldg	5252
110.5	259°	TDZE	2519
		Apt Elev	2558

LOC RWY 26

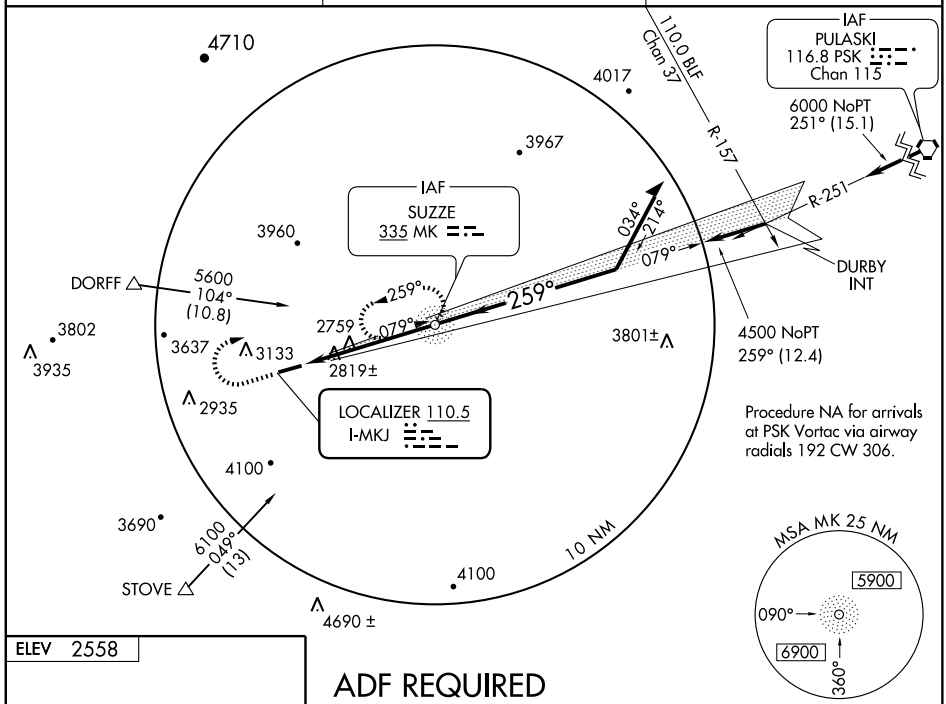
MARION/MOUNTAIN EMPIRE (MKJ)

Circling not authorized north of Rwy 8-26. When local altimeter setting not received, use Twin County altimeter setting and increase all MDA 80 feet, S-26 Cat C visibility ¼ mile and Circling Cat B/C visibility ¼ mile. Visibility reduction by helicopters NA.

NA

MISSED APPROACH: Climb to 4400 then climbing right turn to 6000 direct to MK NDB and hold.

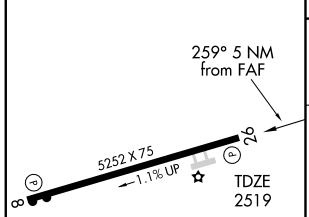
AWOS-3	ATLANTA CENTER	UNICOM
123.875	132.9 319.9	122.7 (CTAF) L

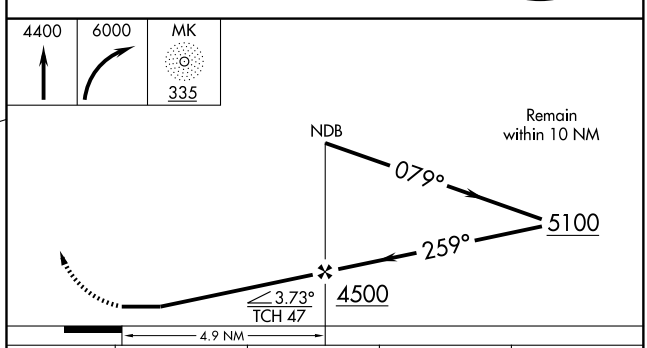


Procedure NA for arrivals at PSK Vortac via airway radials 192 CW 306.

ELEV 2558

ADF REQUIRED





REIL Rwys 8 and 26
MIRL Rwy 8-26 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-26	3080-1	561 (600-1)	3080-1½ 561 (600-1½)	NA
CIRCLING	3260-1	702 (800-1)	3260-2 702 (800-2)	NA

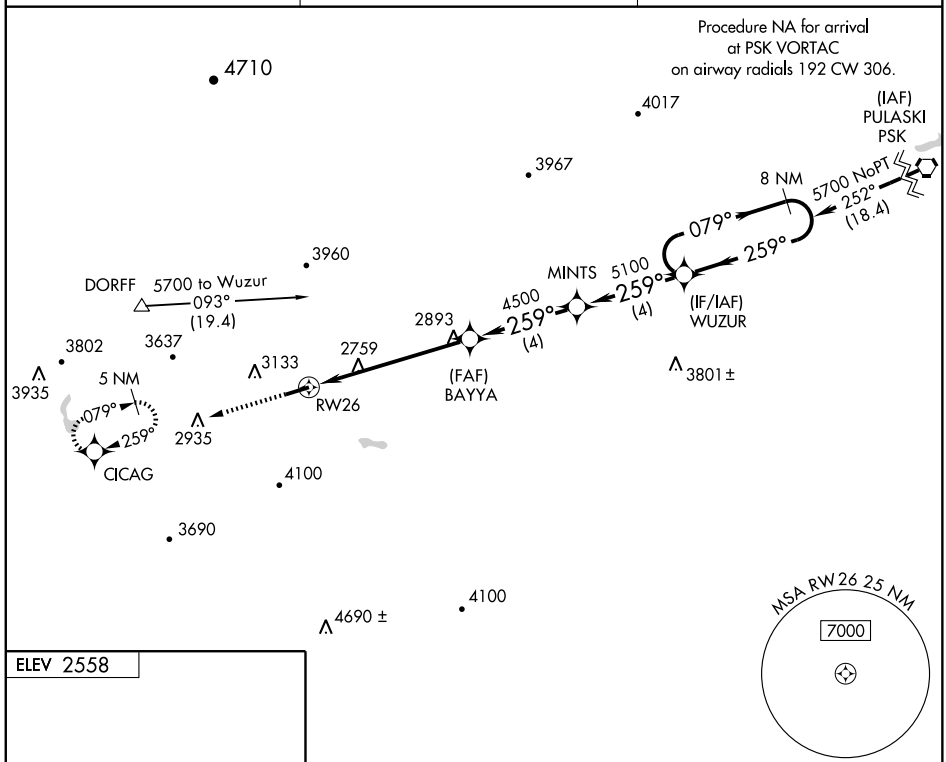
WAAS CH 72802 W26A	APP CRS 259°	Rwy ldg 5252 TDZE 2519 Apt Elev 2558

RNAV (GPS) RWY 26
MARION/MOUNTAIN EMPIRE (MKJ)

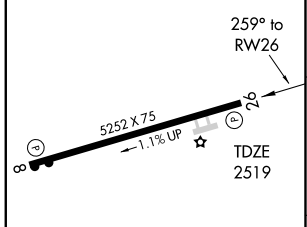
Circling NA north of Rwy 8-26. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. If local altimeter setting not received, use Twin County altimeter setting and increase DA and all MDAs 80 feet.

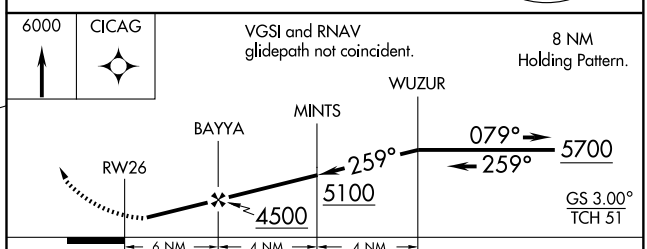
MISSED APPROACH: Climb to 6000 direct CICAG and hold, continue climb-in-hold to 6000.

AWOS-3	ATLANTA CENTER	UNICOM
123.875	132.9 319.9	122.7 (CTAF) L



ELEV 2558





CATEGORY	A	B	C	D
LPV DA	3048-2 529 (600- 2)			NA
LNAV MDA	3280-1 761 (800-1)	3280-1¼ 761 (800-1¼)	3280-2¼ 761 (800-2¼)	NA
CIRCLING	3280-2 722 (800-2)		3280-2¼ 722 (800-2¼)	NA

REIL Rwys 8 and 26
MIRL Rwy 8-26 L

MARTINSVILLE, VIRGINIA

AL-5648 (FAA)

LOC RWY 30

MARTINSVILLE/BLUE RIDGE (MTV)

LOC/DME I-UVM	APP CRS	Rwy ldg	5002
111.3	305°	TDZE	925
Chan 50		Apt Elev	942

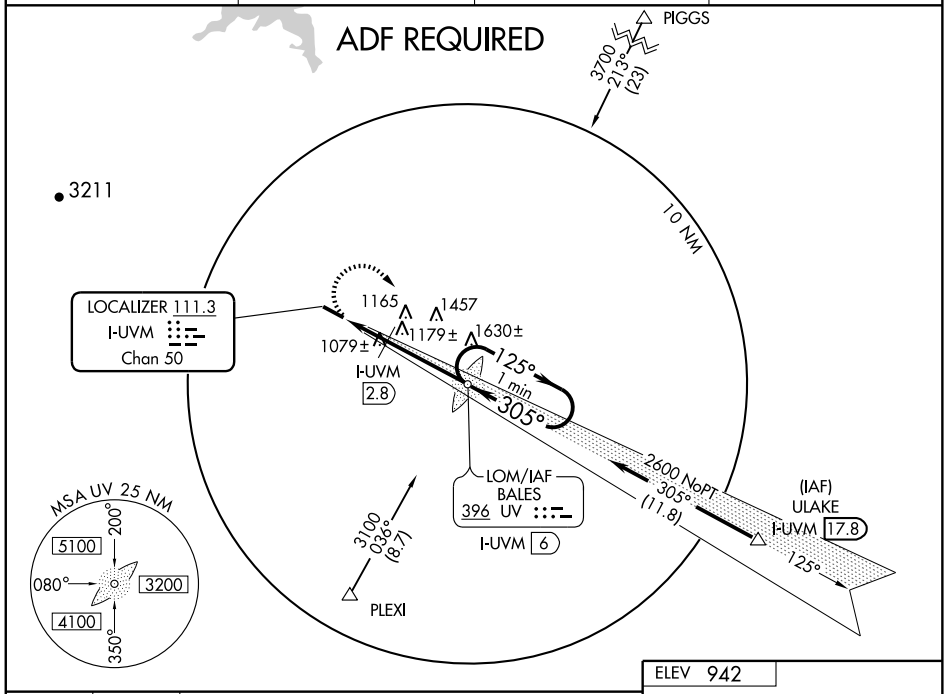
Inoperative table does not apply to ODALS Rwy 30.

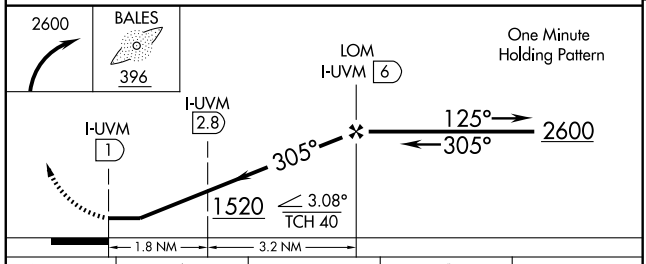
NA

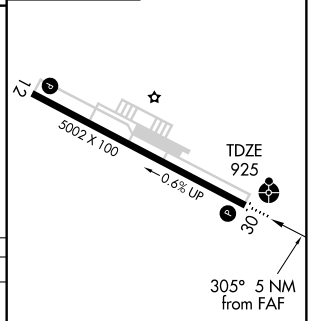
ODALS

MISSED APPROACH: Climbing right turn to 2600 to BALES LOM and hold.

AWOS-3	GREENSBORO APP CON	CLNC DEL	UNICOM
118.45	124.35 269.225	124.85	122.7 (CTAF) L







REIL Rwys 12 and 30 L

MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-30	1520-1 595 (600-1)		1520-1½ 595 (600-1½)	1520-1¾ 595 (600-1¾)
CIRCLING	1560-1 618 (700-1)		1560-1¾ 618 (700-1¾)	1560-2 618 (700-2)
DME MINIMUMS				
S-30	1340-1 415 (400-1)		1340-1¼ 415 (400-1¼)	
CIRCLING	1560-1 618 (700-1)		1560-1¾ 618 (700-1¾)	1560-2 618 (700-2)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5002
125°	TDZE	941
	Apt Elev	941

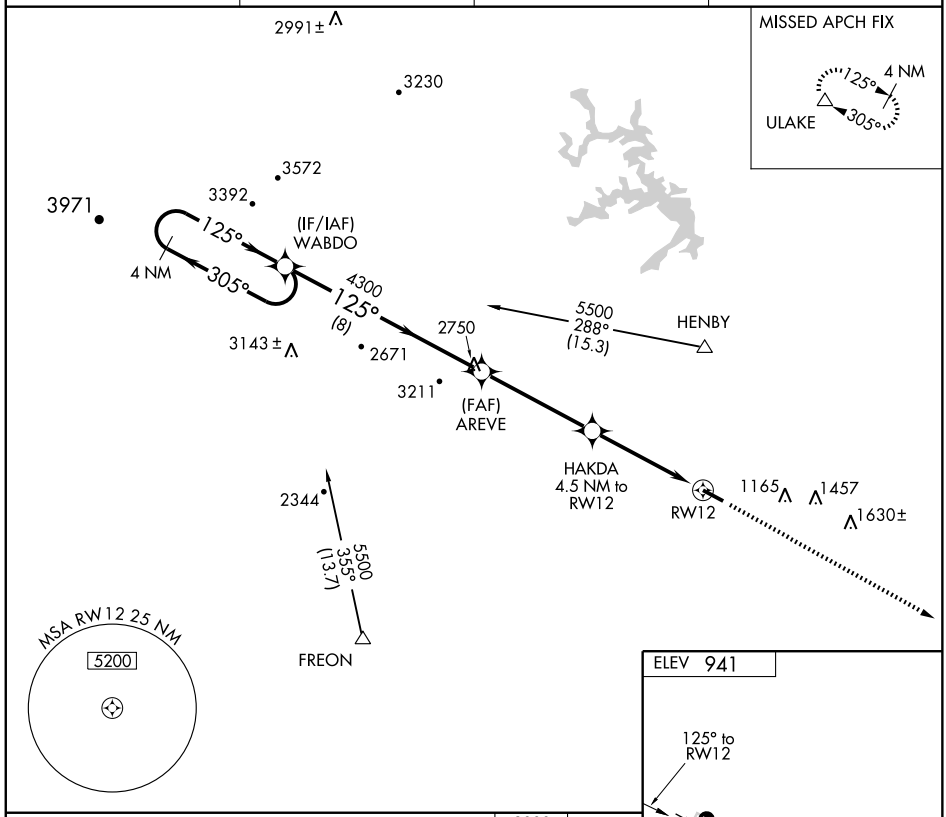
RNAV (GPS) RWY 12
MARTINSVILLE/BLUE RIDGE (MTV)

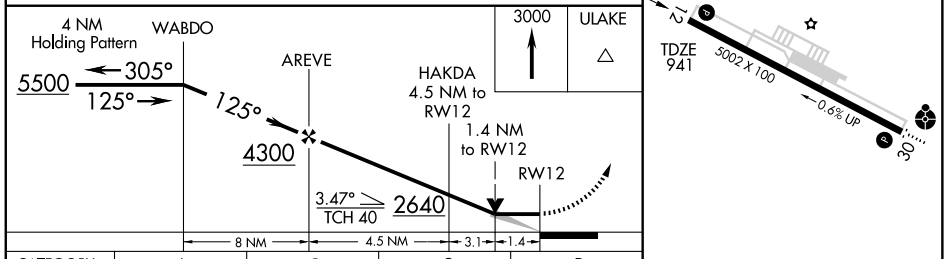
GPS or RNP -0.3 required.
DME/DME RNP -0.3 NA.

NA

MISSED APPROACH: Climb to 3000 direct ULAKE WP and hold.

AWOS-3	GREENSBORO APP CON	CLNC DEL	UNICOM
118.45	124.35 269.225	124.85	122.7 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1420-1 479 (500-1)		1420-1¼ 479 (500-1¼)	1420-1½ 479 (500-1½)
CIRCLING	1420-1 479 (500-1)		1420-1½ 479 (500-1½)	1520-2 579 (600-2)

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

WAAS CH 65802 W30A	APP CRS 305°	Rwy ldg 5002 TDZE 925 Apt Elev 941

RNAV (GPS) RWY 30

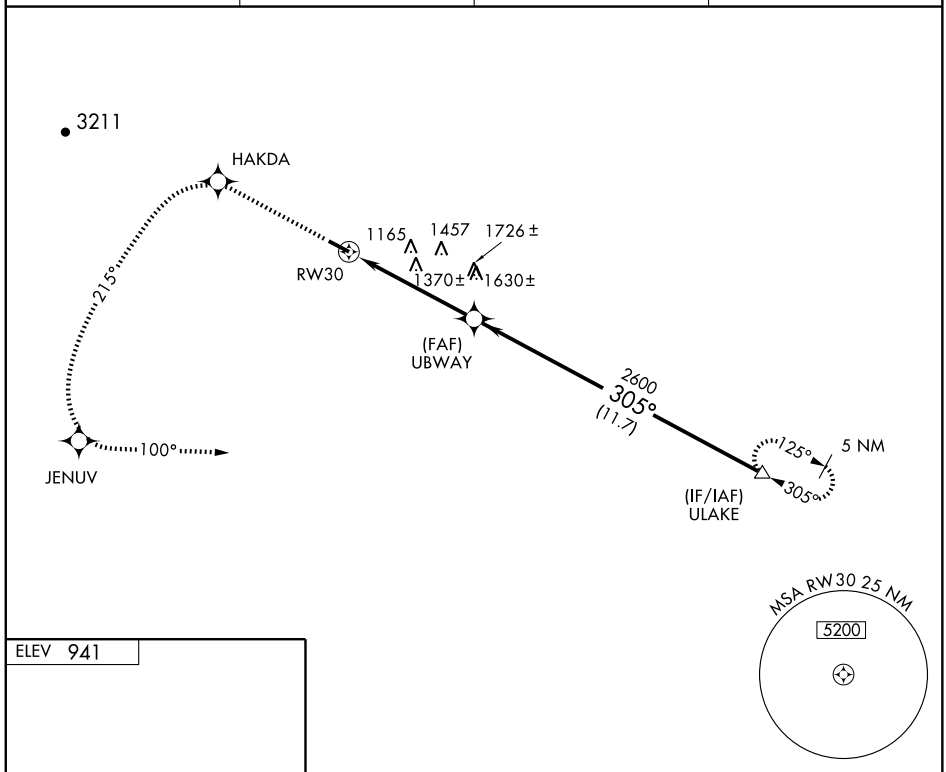
MARTINSVILLE/ BLUE RIDGE (MTV)

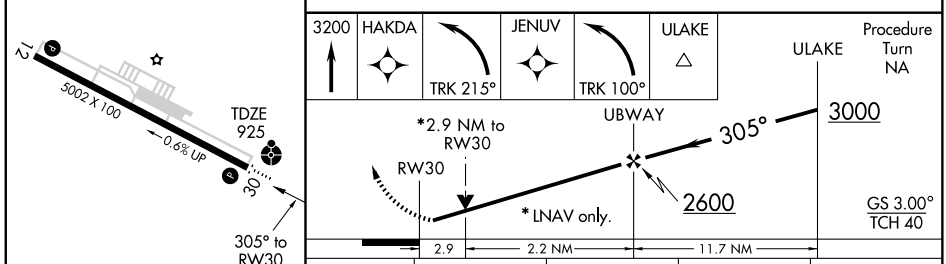
If local altimeter setting not received, use Reidsville, NC altimeter setting and increase DAs to 1344 feet and all MDAs 180 feet.
Inoperative table does not apply.
Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

ODALS

MISSED APPROACH: Climb to 3200 direct HAKDA and via 215° track to JENUV and left turn via 100° track to ULAKE and hold.

AWOS-3	GREENSBORO APP CON	CLNC DEL	UNICOM
118.45	124.35 269.225	124.85	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1175-1 250 (300-1)			
LNAV MDA	1880-1¼ 955 (1000-1¼)	1880-1½ 955 (1000-1½)	1880-3 995 (1000-3)	
CIRCLING	1880-1¼ 939 (1000-1¼)	1880-1½ 939 (1000-1½)	1880-3 939 (1000-3)	

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

LOC I-MFV	APP CRS	Rwy ldg	5000
110.15	034°	TDZE	47
		Apt Elev	47

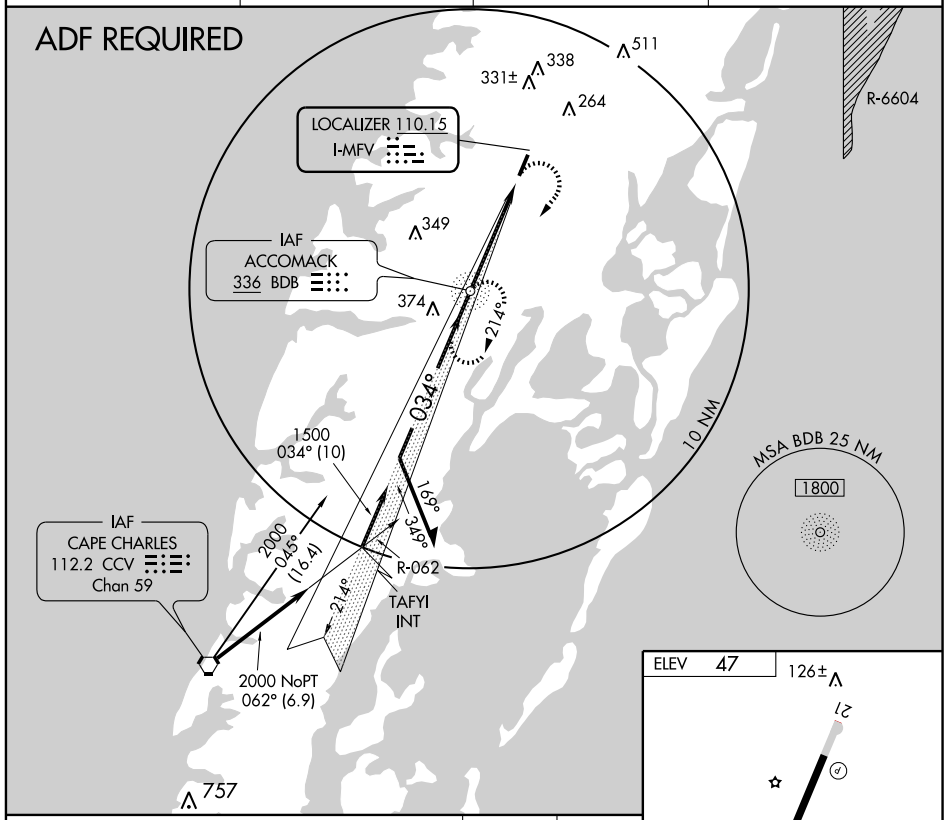
LOC RWY 3

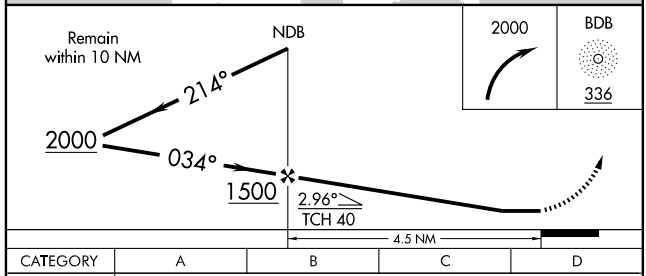
MELFA / ACCOMACK COUNTY (MFV)

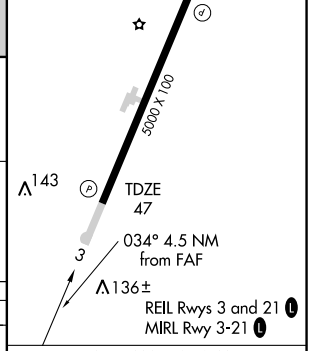
NA

MISSED APPROACH: Climbing right turn to 2000 direct BDB NDB and hold.

AWOS-3	PATUXENT APP CON	GCO	UNICOM
118.175	127.95 314.0	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-LOC 3	400-1 353 (400-1)			
CIRCLING	480-1 433 (500-1)	560-1 513 (600-1)	560-1½ 513 (600-1½)	620-2 573 (600-2)

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

WAAS CH 42905 W03A	APP CRS 034°	Rwy ldg 5000 TDZE 47 Apt Elev 47

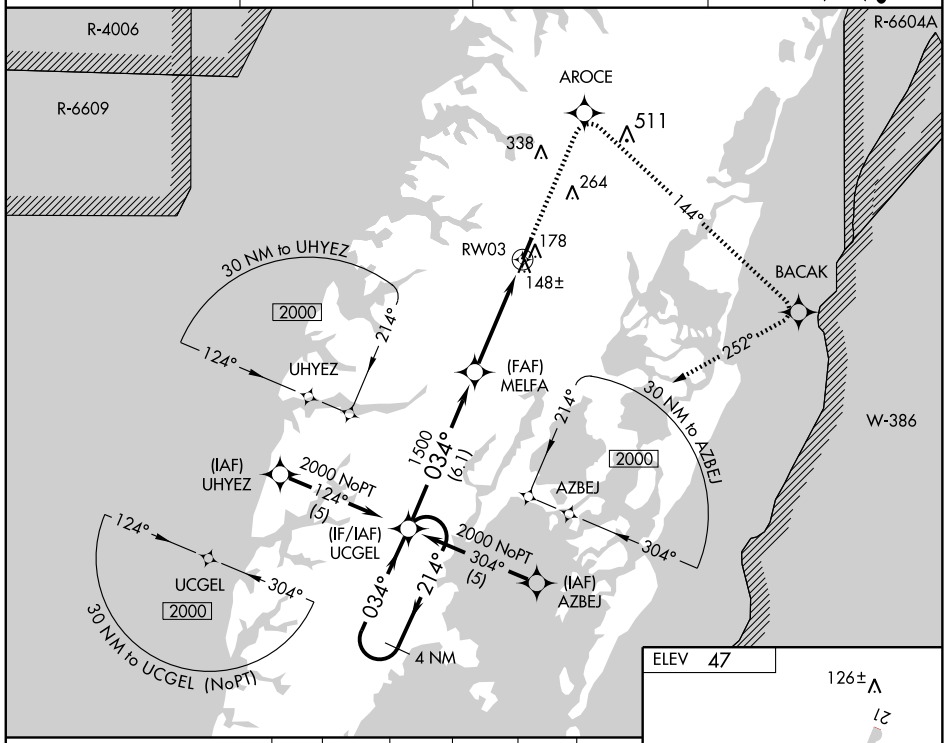
RNAV (GPS) RWY 3

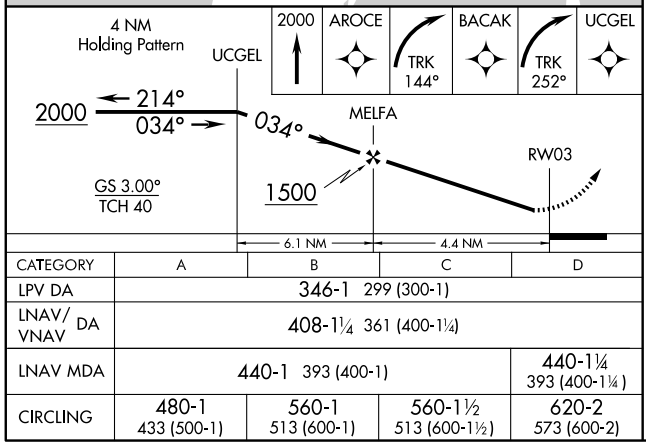
MELFA / ACCOMACK COUNTY (MFV)

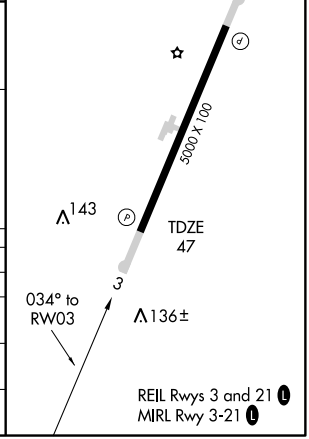
If local altimeter setting not received, use Wallops Island altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Wallops Island altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct AROCE and right turn via 144° track to BACAK and right turn via 252° track to UCGEL and hold.

AWOS-3	PATUXENT APP CON	GCO	UNICOM
118.175	127.95 314.0	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	346-1 299 (300-1)			
LNAV/VNAV DA	408-1¼ 361 (400-1¼)			
LNAV MDA	440-1 393 (400-1)			440-1¼ 393 (400-1¼)
CIRCLING	480-1 433 (500-1)	560-1 513 (600-1)	560-1½ 513 (600-1½)	620-2 573 (600-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

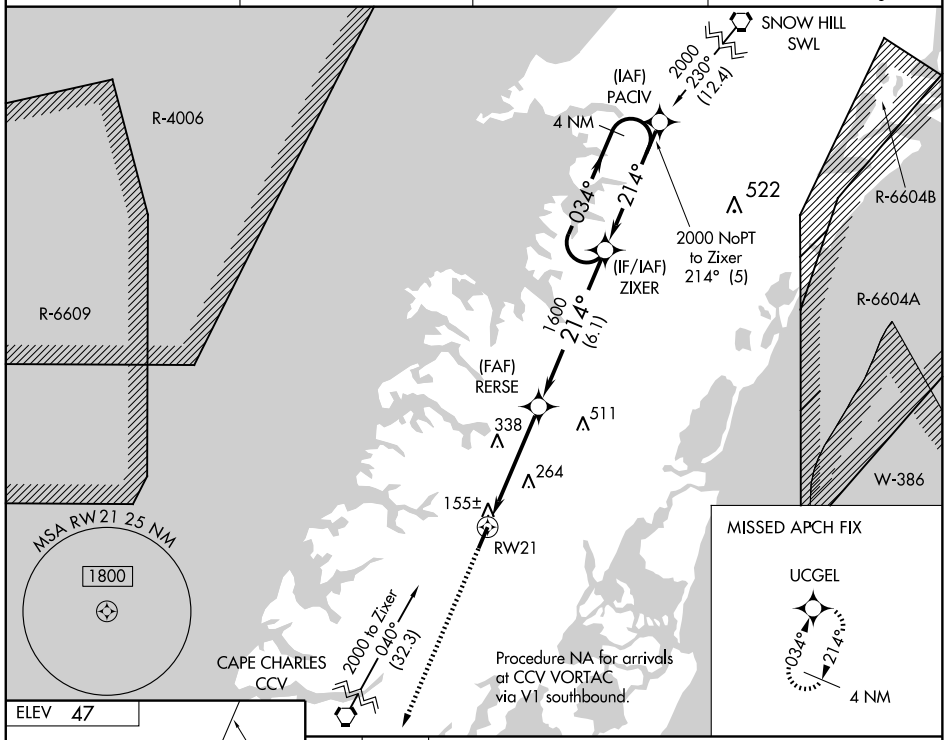
WAAS CH 69505 W21A	APP CRS 214°	Rwy ldg 5000 TDZE 47 Apt Elev 47

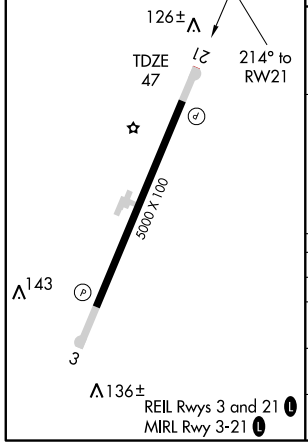
RNAV (GPS) RWY 21
MELFA / ACCOMACK COUNTY (MFV)

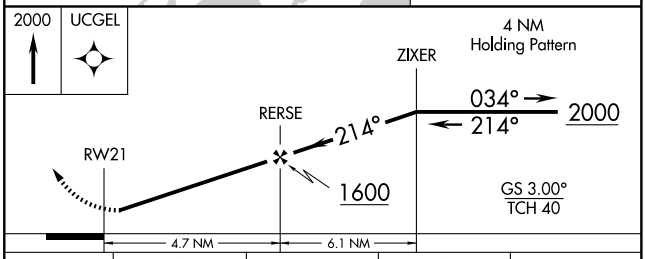
If local altimeter setting not received, use Wallops Island altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Wallops Island altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct UCGEL and hold.

AWOS-3	PATUXENT APP CON	GCO	UNICOM
118.175	127.95 314.0	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	362-1 315 (400-1)			
LNAV/VNAV DA	545-1¾ 498 (500-1¾)			
LNAV MDA	600-1 553 (600-1)		600-1½ 553 (600-1½)	600-1¾ 553 (600-1¾)
CIRCLING	600-1 553 (600-1)		600-1½ 553 (600-1½)	620-2 573 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC CCV 112.2 Chan 59	APP CRS 042°	Rwy ldg 5000 TDZE 47 Apt Elev 47

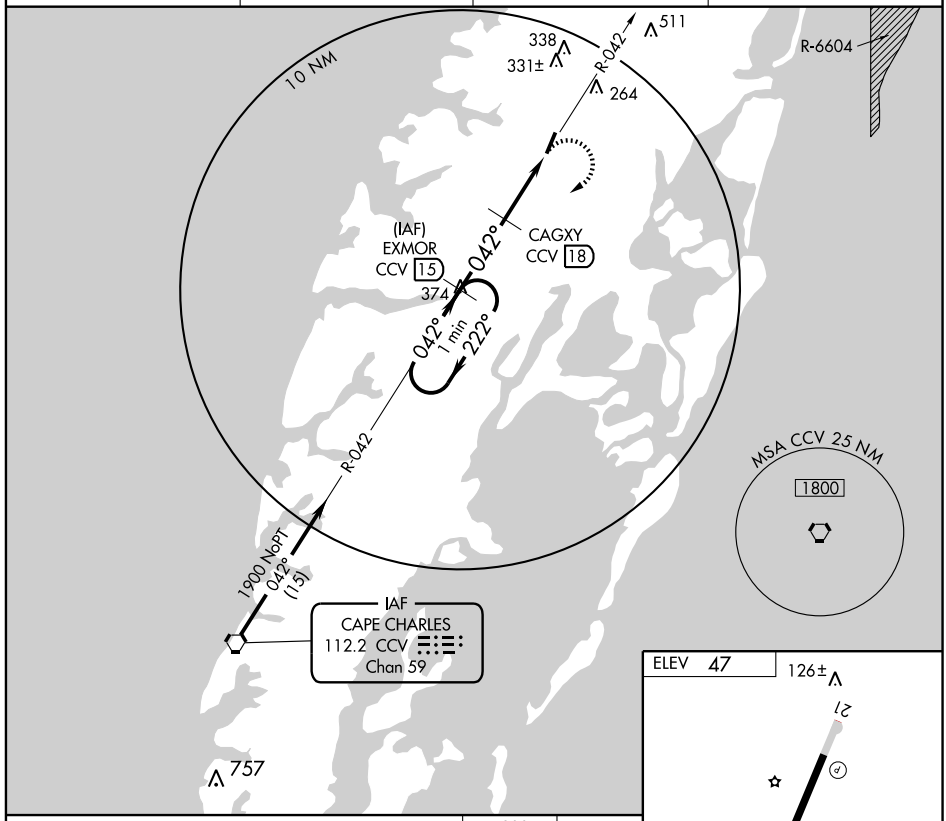
VOR/DME RWY 3

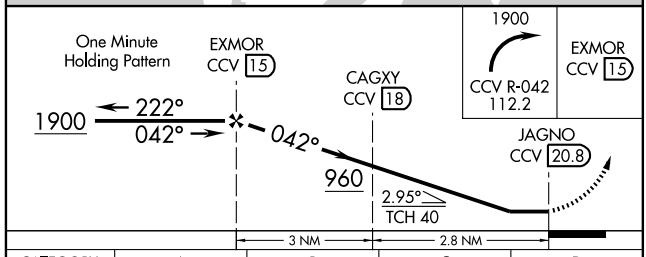
MELFA / ACCOMACK COUNTY (MFV)

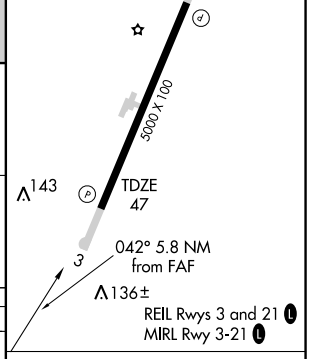
NA

MISSED APPROACH: Climbing right turn to 1900 via CCV VORTAC R-042 to EXMOR/CCV 15 DME and hold.

AWOS-3	PATUXENT APP CON	GCO	UNICOM
118.175	127.95 314.0	135.075	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-3	440-1 393 (400-1)	440-1¼ 393 (400-1¼)	440-1½ 393 (400-1½)	440-1¾ 393 (400-1¾)
CIRCLING	480-1 453 (500-1)	560-1¼ 513 (600-1¼)	560-1½ 513 (600-1½)	620-2 573 (600-2)

Knots	60	90	120	150	180
Min:Sec					

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC LYH 109.2 Chan 29	APP CRS 247°	Rwy ldg 3058 TDZE 893 Apt Elev 893

VOR/DME or GPS RWY 23

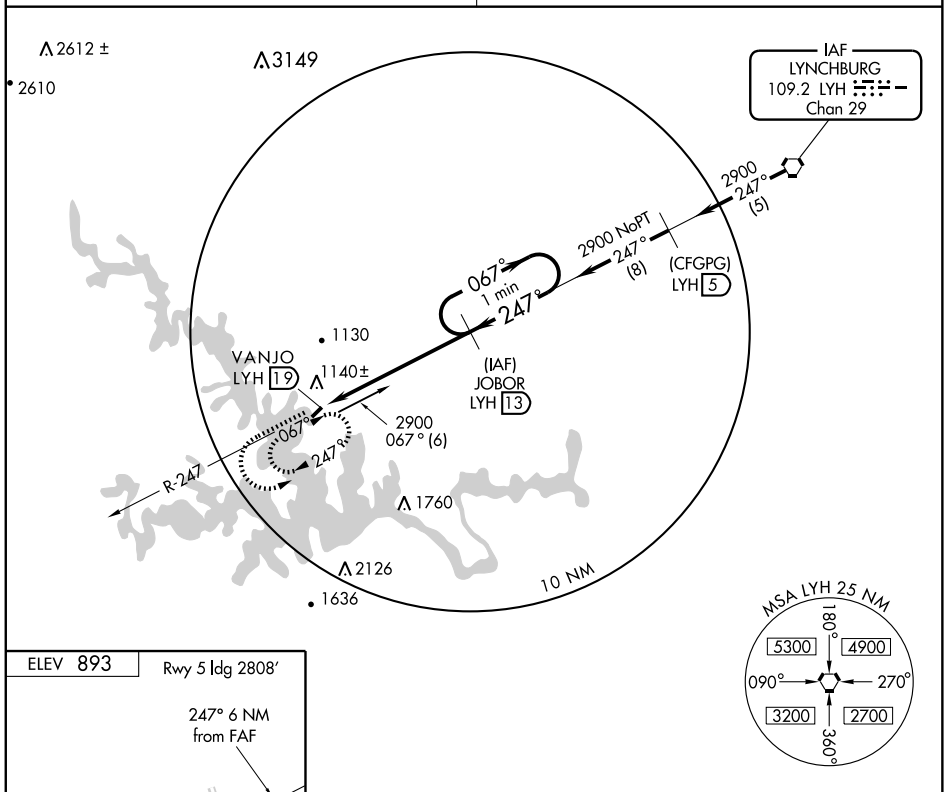
MONETA/SMITH MOUNTAIN LAKE (W91)

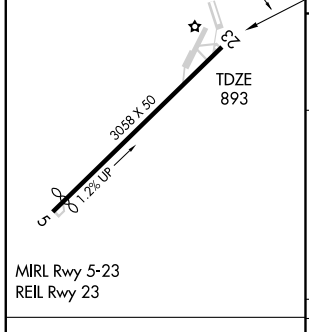
Use Lynchburg altimeter setting; if not received, use Roanoke altimeter setting and increase all MDAs 60 feet. Procedure not authorized at night except by prior arrangement for runway lights.

NA

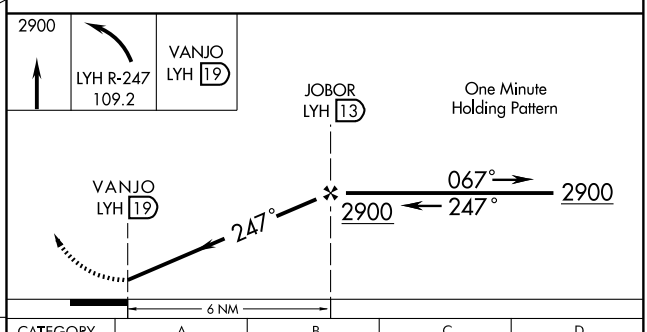
MISSED APPROACH: Climb straight ahead to 2900 then left turn to VANJO 19 DME via LYH R-247 and hold.

ROANOKE APP CON	UNICOM
135.0 254.32	122.8 (CTAF)





MIRL Rwy 5-23
REIL Rwy 23



Knots	60	90	120	150	180
Min:Sec					

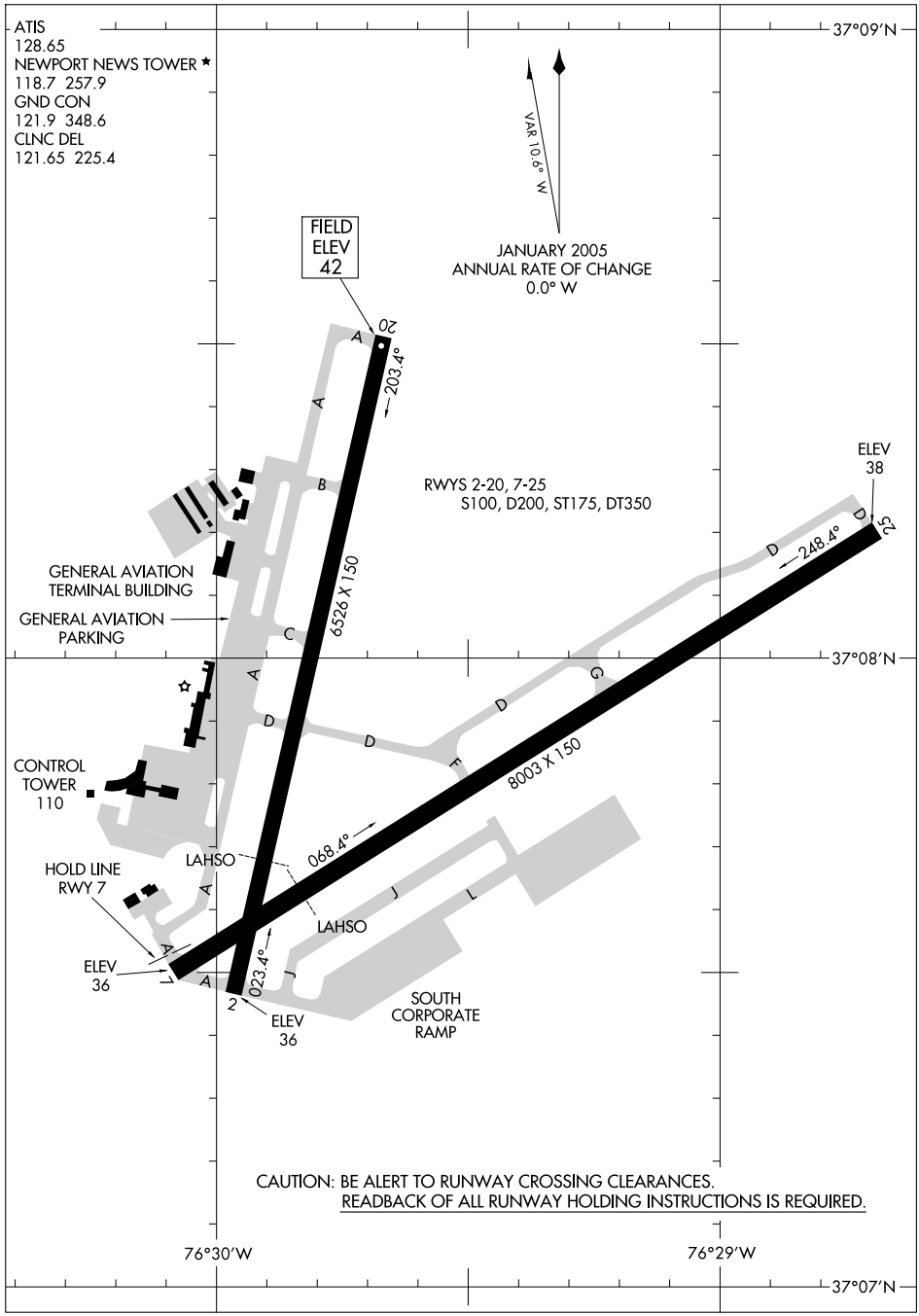
CATEGORY	A	B	C	D
S-23	1540-1	647 (700-1)	NA	
CIRCLING	1540-1	647 (700-1)	NA	

NE-3, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-957 (FAA)

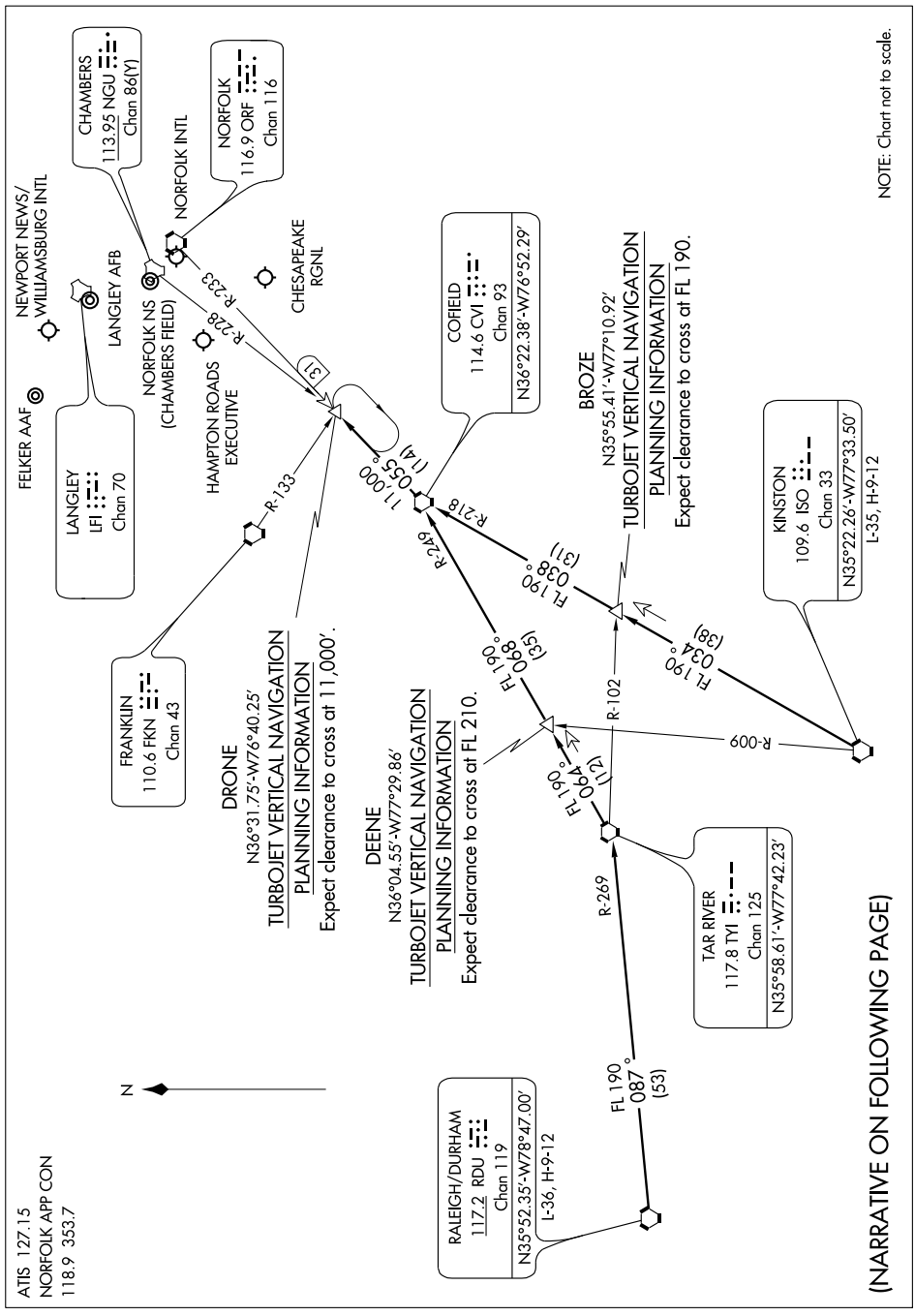
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)
NEWPORT NEWS, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

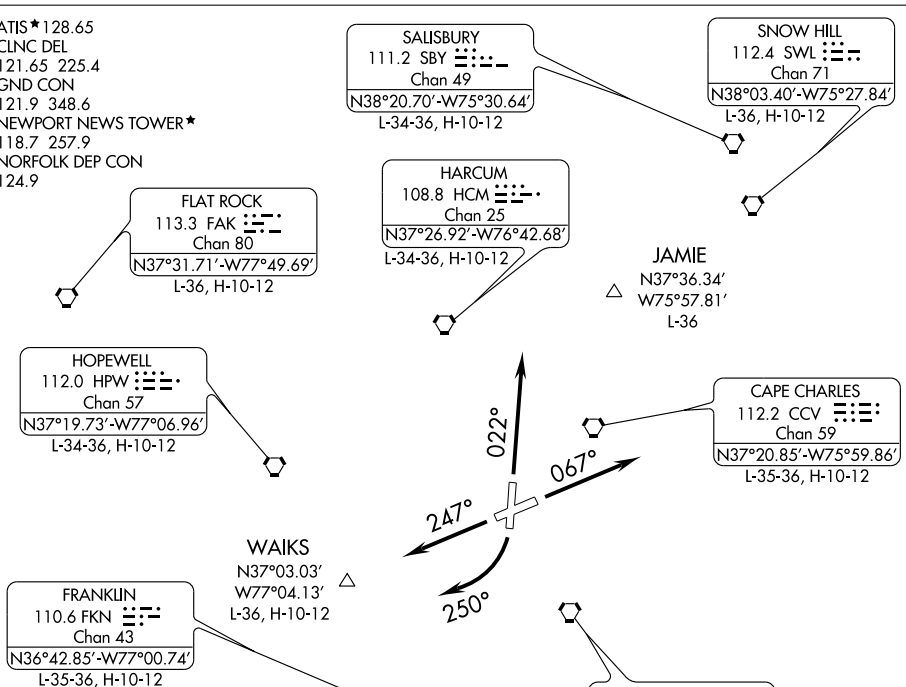
NE-3. 14 JAN 2010 to 11 FEB 2010

HENRY TWO DEPARTURE

SL-957 (FAA)

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)
NEWPORT NEWS, VIRGINIA

ATIS★128.65
CLNC DEL
121.65 225.4
GND CON
121.9 348.6
NEWPORT NEWS TOWER★
118.7 257.9
NORFOLK DEP CON
124.9



TAKE-OFF OBSTACLES

Rwy 2: Bush, 295′ from DER, 291′ right of centerline, 22′ AGL/62′ MSL.
Tree, 937′ from DER, 603′ left of centerline, 81′ AGL/131′ MSL.
Pole, 1221′ from DER, 487′ right of centerline, 31′ AGL/81′ MSL.
Tree, 1275′ from DER, 517′ left of centerline, 79′ AGL/132′ MSL.
Multiple Trees beginning 1554′ from DER, 298′ left of centerline, up to 88′ AGL/141′ MSL.
Tree, 1686′ from DER, 428′ right of centerline, 61′ AGL/114′ MSL.
Tree, 1849′ from DER, 598′ right of centerline, 72′ AGL/125′ MSL.
T-L Tower, 3351′ from DER, 1008′ left of centerline, 109′ AGL/161′ MSL.

Rwy 7: Tree, 371′ from DER, 588′ left of centerline, 36′ AGL/73′ MSL.
T-L Tower, 4120′ from DER, 1324′ right of centerline, 93′ AGL/116′ MSL.
T-L Tower, 5625′ from DER, 1345′ left of centerline, 133′ AGL/191′ MSL.

Rwy 20: Bush, 96′ from DER, 293′ left of centerline, 22′ AGL/52′ MSL.
Stack, 5977′ from DER, 598′ left of centerline, 186′ AGL/227′ MSL.

Rwy 25: Tree, 694′ from DER, 549′ right of centerline, 42′ AGL/65′ MSL.
Tree, 1020′ from DER, 703′ right of centerline, 23′ AGL/97′ MSL.
Tree, 1622′ from DER, 529′ left of centerline, 59′ AGL/79′ MSL.
Tree 2654′ from DER, 335′ right of centerline, 86′ AGL/106′ MSL.
Tree. 3435′ from DER, 1125′ right of centerline, 116′ AGL/139′ MSL.

TAKE-OFF MINIMUMS

Rwys 2, 7, 25: STANDARD
Rwy 20: 300-1¼ or STANDARD with a minimum climb of 255 feet per NM to 300.

NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 2: Climb heading 022° to 2000, thence . . . .
TAKE-OFF RUNWAY 7: Climb heading 067° to 2000, thence . . . .
TAKE-OFF RUNWAY 20: Climbing right turn to 2000 via heading 250°, thence . . . .
TAKE-OFF RUNWAY 25: Climb heading 247° to 2000, thence . . . .
. . . . via vectors to assigned route/fix. Expect clearance to requested altitude 10 minutes after departure.

LOC/DME I-PHF	APP CRS	Rwy ldg 8003
110.1	067°	TDZE 40
Chan 38		Apt Elev 43

ILS or LOC RWY 7

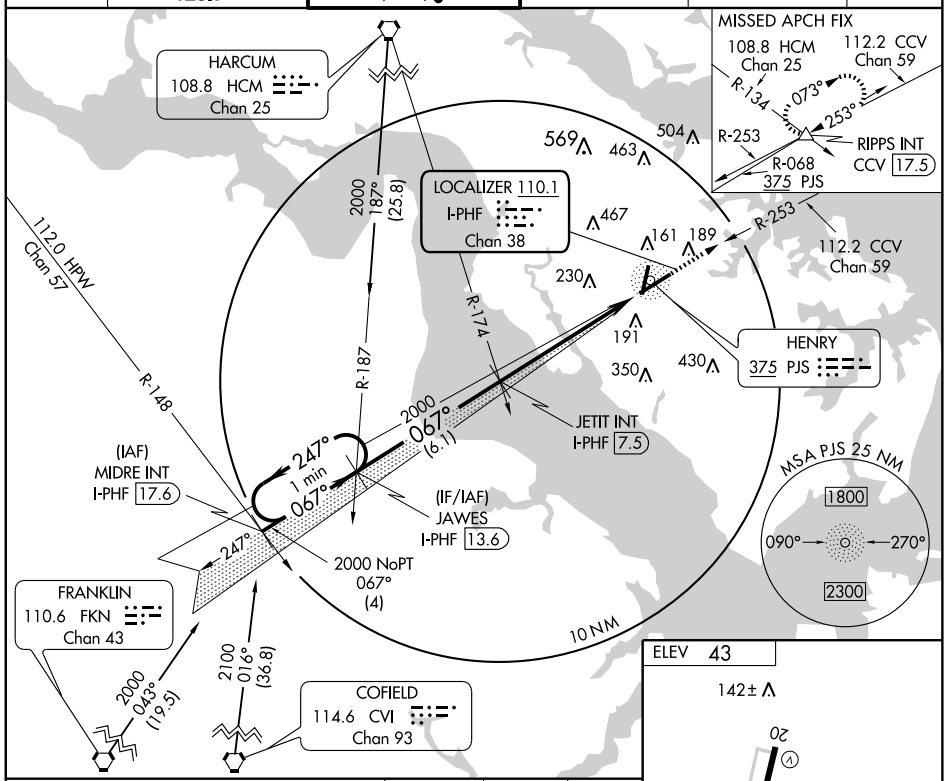
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

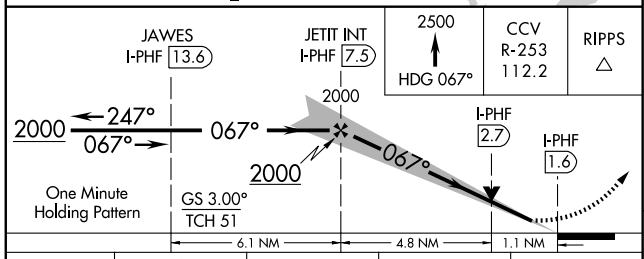
When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all DA/MDA 60 feet. Increase S-ILS 7 visibility ¼ mile all Cats, increase S-LOC 7 Cats C/D visibility ¼ mile. VDP NA when using Norfolk Intl altimeter setting.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

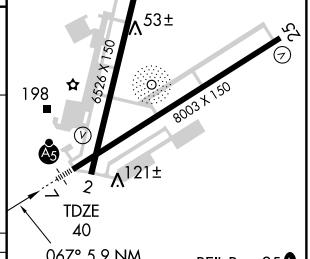
MALSR

MISSED APPROACH: Climb to 2500 via heading 067° and CCV VORTAC R-253 to RIPPS INT/ CCV 17.5 DME and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER*	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95







REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

CATEGORY	A	B	C	D
S-ILS 7	* 240/24 200 (200-½)			
S-LOC 7	440/24 400 (400-½)			440/40 400 (400-¾)
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NE-3. 14 JAN 2010 to 11 FEB 2010

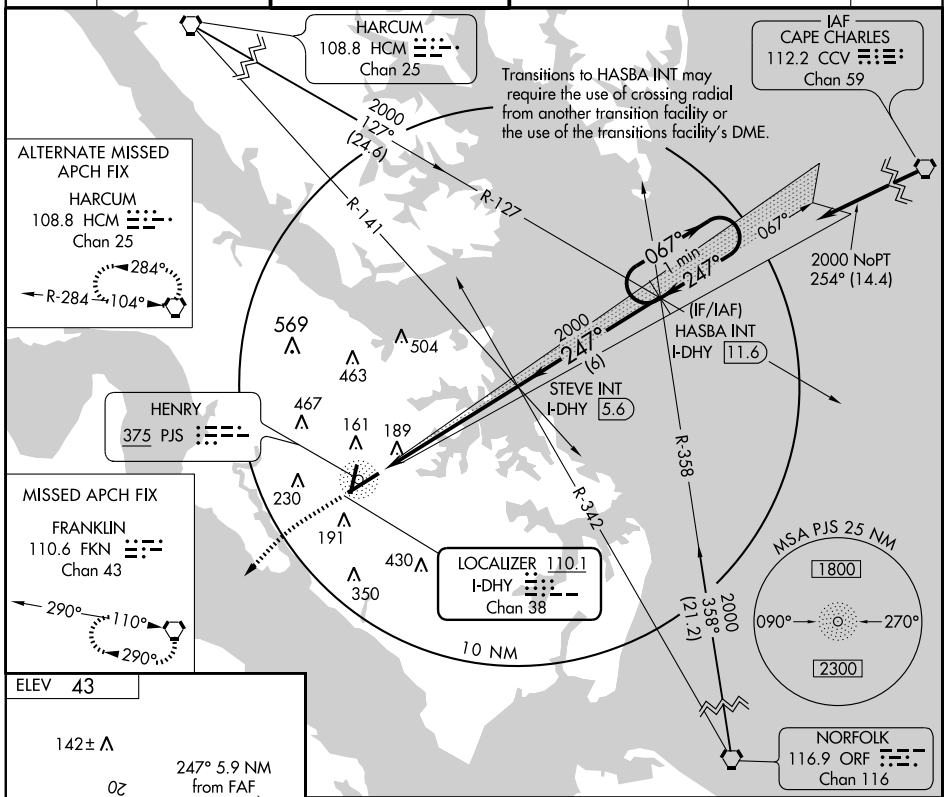
LOC/DME I-DHY	APP CRS	Rwy ldg	8003
110.1	247°	TDZE	41
Chan 38		Apt Elev	43

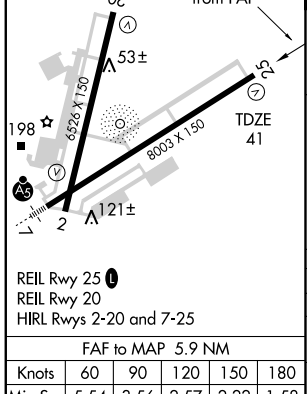
ILS or LOC RWY 25

NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

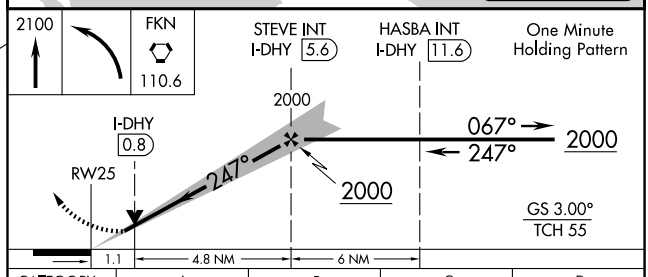
MISSED APPROACH: Climb to 2100, then left turn direct FKN VORTAC and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) Ⓛ 257.9	121.9 348.6	121.65 225.4	122.95





FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



CATEGORY	A	B	C	D
S-ILS 25	241-¾ 200 (200-¾)			
S-LOC 25	440-1 399 (400-1)			440-1¼ 399 (400-1¼)
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)

LOC/DME I-FJQ 109.3 Chan 30	APP CRS 202°	Rwy ldg 6526 TDZE 43 Apt Elev 43

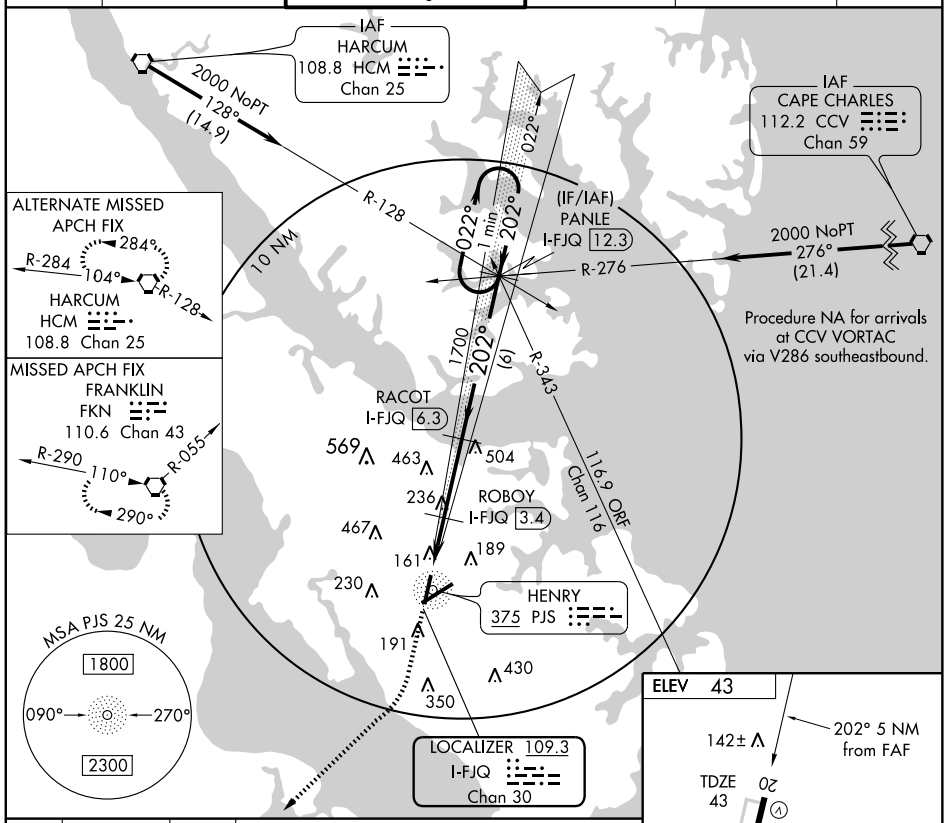
LOC/DME RWY 20

NEWPORT NEWS/WILLIAMSBURG INTL (PHF)

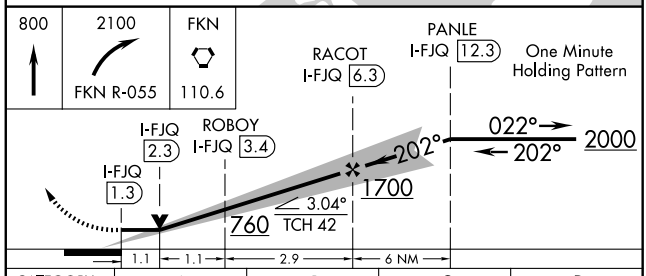
If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 60 feet. Visibility reduction by helicopters NA. VDP NA when using Norfolk Intl altimeter setting.

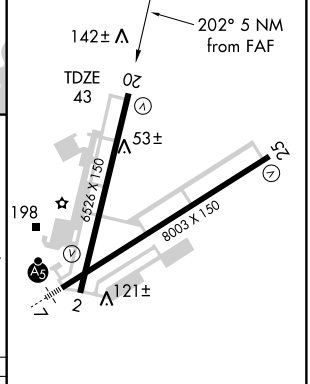
MISSED APPROACH: Climb to 800 then climbing right turn to 2100 via FKN VORTAC R-055 to FKN VORTAC and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95



800	2100	FKN
	FKN R-055	110.6





CATEGORY	A	B	C	D
S-20	420-1 377 (400-1)			420-1¼ 377 (400-1¼)
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)

REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

NE-3. 14 JAN 2010 to 11 FEB 2010

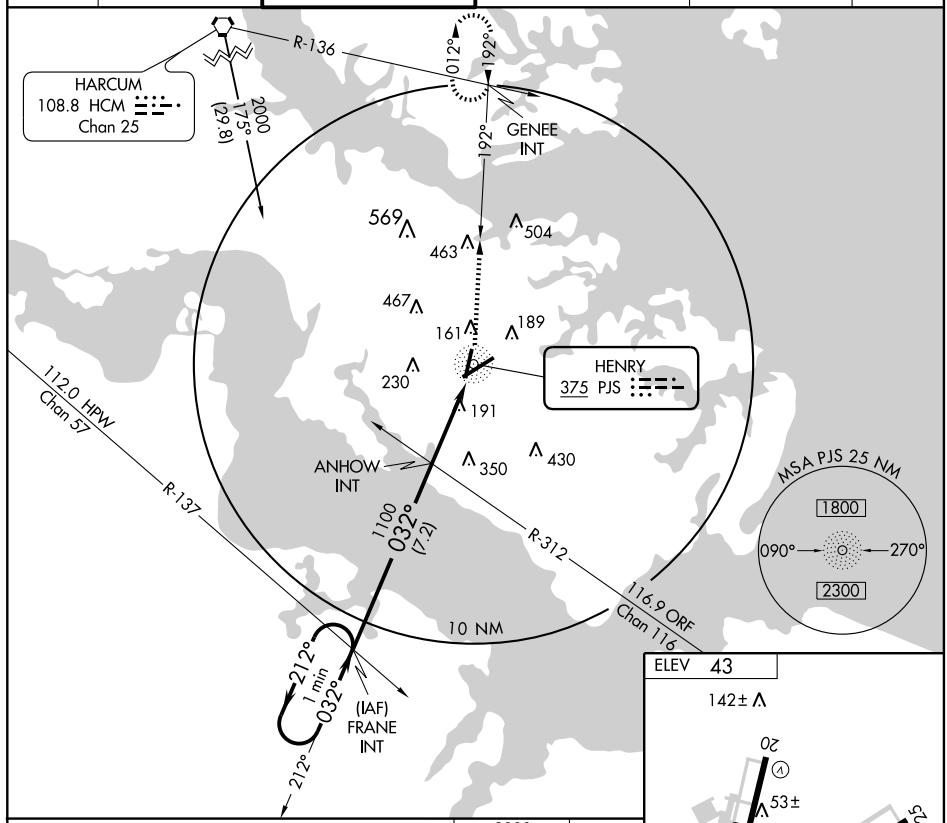
NDB PJS	APP CRS	Rwy ldg	6526
375	032°	TDZE	39
		Apt Elev	43

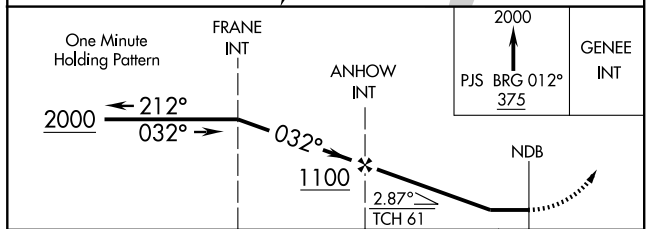
NDB RWY 2

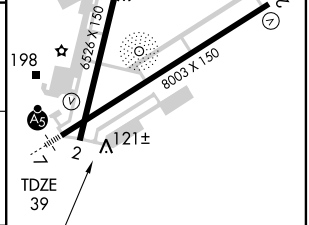
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

MISSED APPROACH: Climb to 2000 via PJS NDB bearing 012° to GENEE Int and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95







REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

CATEGORY	A	B	C	D
S-2	700-1 661 (700-1)		700-1¾ 661 (700-1¾)	700-2 661 (700-2)
CIRCLING	700-1 657 (700-1)		700-1¾ 657 (700-1¾)	700-2 657 (700-2)

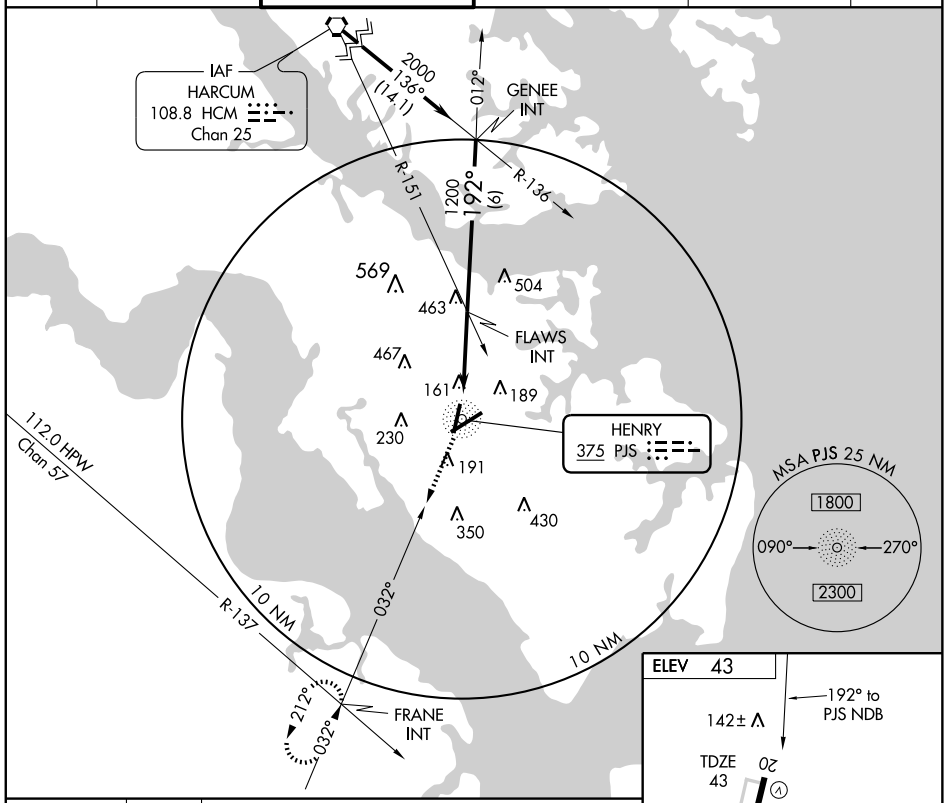
NDB PJS	APP CRS	Rwy ldg	6526
375	192°	TDZE	43
		Apt Elev	43

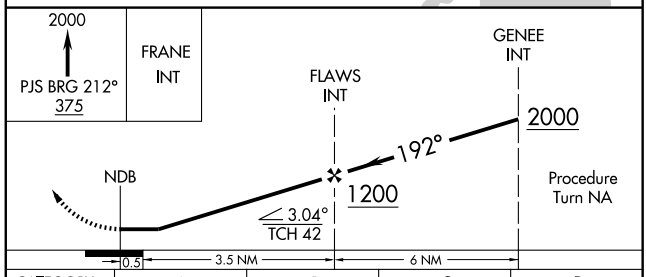
NDB RWY 20

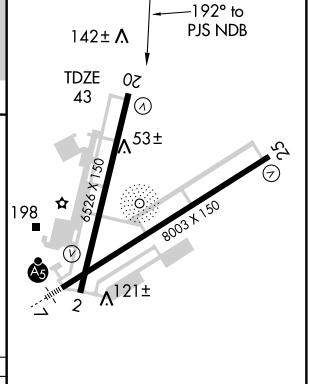
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

MISSED APPROACH: Climb to 2000 via PJS NDB bearing 212° to FRANE Int and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95







CATEGORY	A	B	C	D
S-20	860-1 817 (900-1)	860-1¼ 817 (900-1¼)	860-2½ 817 (900-2½)	860-2¾ 817 (900-2¾)
CIRCLING	860-1 817 (900-1)	860-1¼ 817 (900-1¼)	860-2½ 817 (900-2½)	860-2¾ 817 (900-2¾)

REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

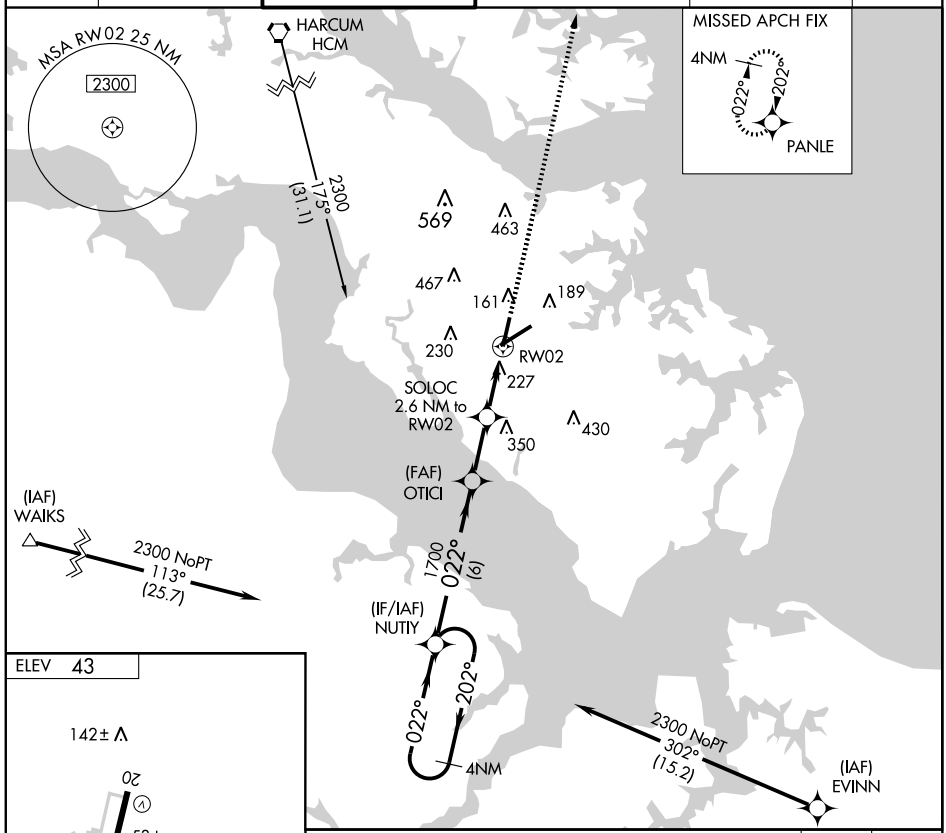
APP CRS	Rwy ldg	6526
022°	TDZE	39
	Apt Elev	43

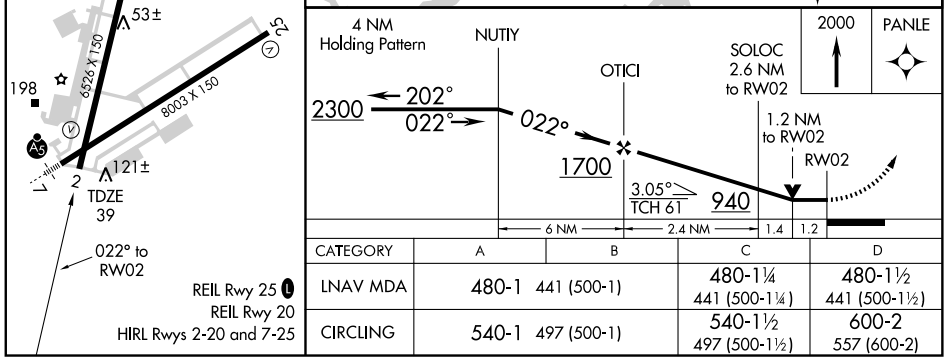
RNAV (GPS) RWY 2
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct PANLE WP and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95





CATEGORY	A	B	C	D
LNAV MDA	480-1 441 (500-1)		480-1¼ 441 (500-1¼)	480-1½ 441 (500-1½)
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)

WAAS CH 45607 W07A	APP CRS 067°	Rwy ldg 8003 TDZE 40 Apt Elev 43

RNAV (GPS) RWY 7

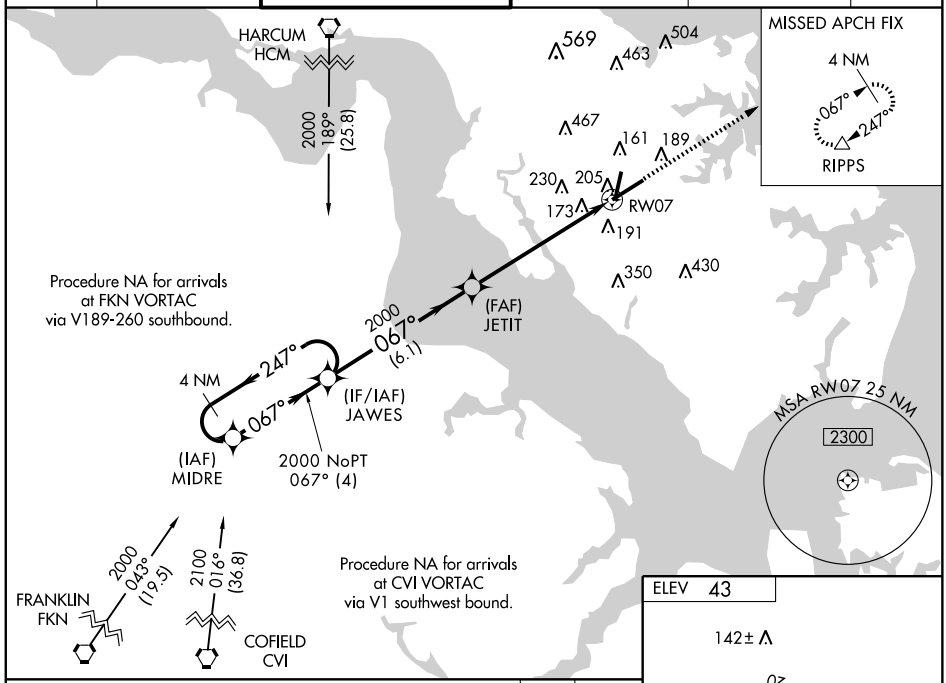
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

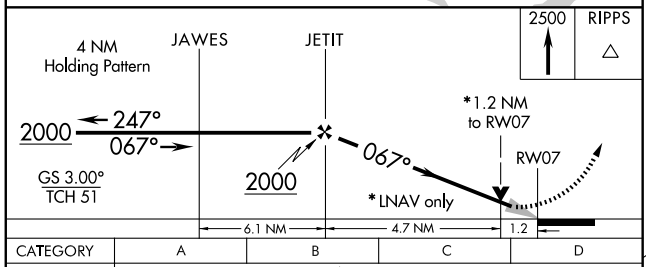
When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all DA 49 feet and all MDA 60 feet. Increase visibility LPV all Cats to RVR 4000, increase visibility LNAV/VNAV all Cats to RVR 6000. VDP and Baro-VNAV NA when using Norfolk Intl altimeter setting. For inoperative MALSR when using Norfolk Intl altimeter setting: increase LPV all Cats visibility RVR 6000. For uncompensated Baro-VNAV systems, LNAV/ VNAV NA below -15°C (5°F) or above 49°C (120°F). For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. DME/DME RNP-0.3 NA.

MALSR

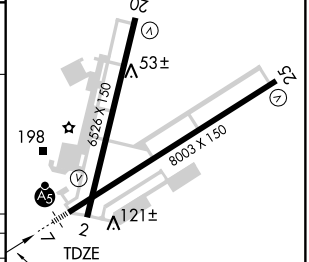
MISSED APPROACH: Climb to 2500 direct RIPPS and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95





CATEGORY	A	B	C	D
LPV DA	354/24 314 (400-½)			
LNAV/ VNAV DA	474/50 434 (500-1)			
LNAV MDA	460/24 420 (500-½)		460/40 420 (500-¾)	460/50 420 (500-1)
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)



REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	6526
202°	TDZE	43
	Apt Elev	43

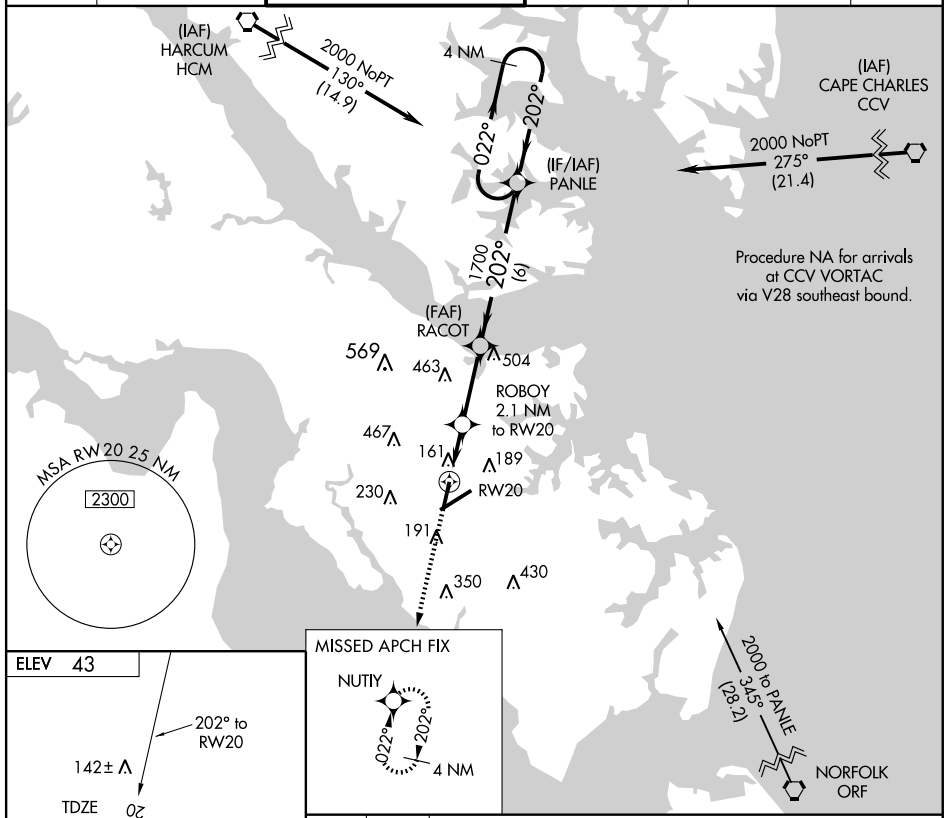
RNAV (GPS) RWY 20

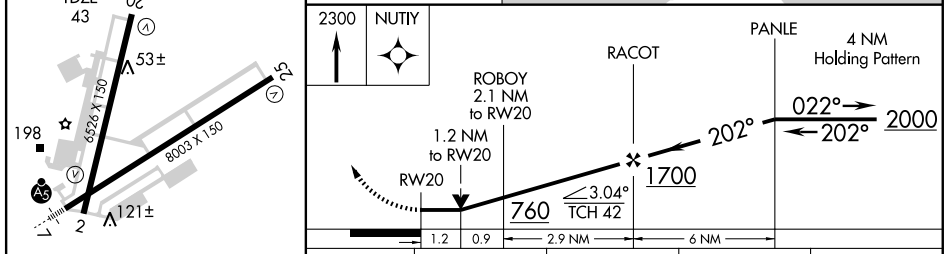
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

When local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDA 60 feet and LNAV Cat D visibility ¼ mile. VDP NA when using Norfolk Intl altimeter setting. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2300 direct NUTIY and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95





REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

CATEGORY	A	B	C	D
LNAV MDA	460-1 417 (500-1)		460-1¼ 417 (500-1¼)	
CIRCLING	540-1 497 (500-1)		540-1½ 497 (500-1½)	600-2 557 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

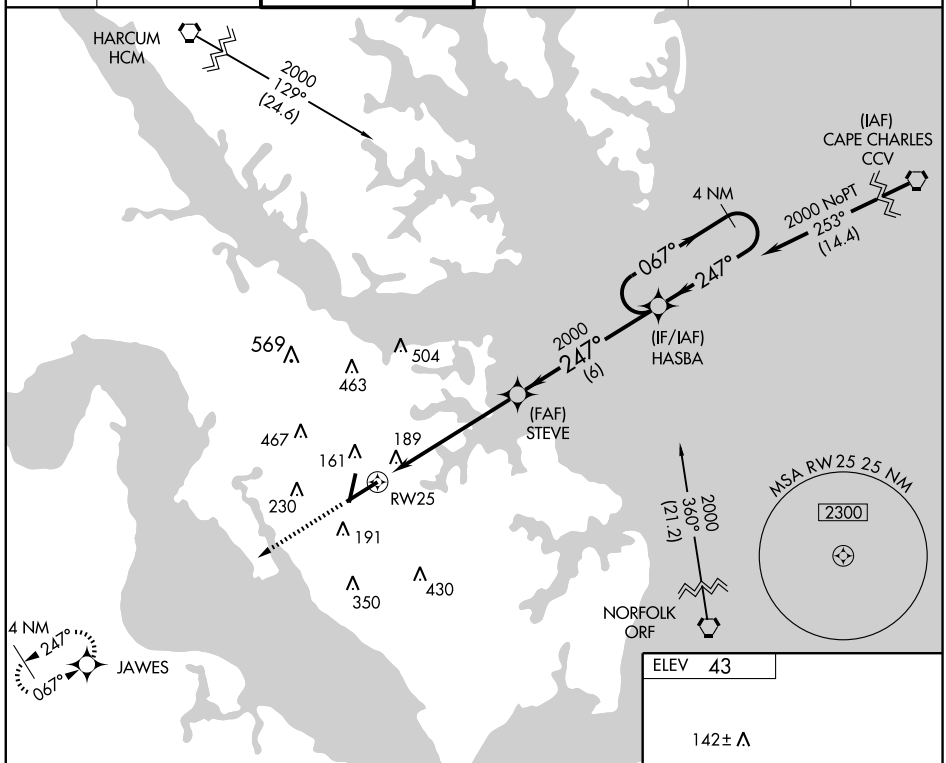
WAAS CH 45510 W25A	APP CRS 247°	Rwy ldg 8003 TDZE 41 Apt Elev 43

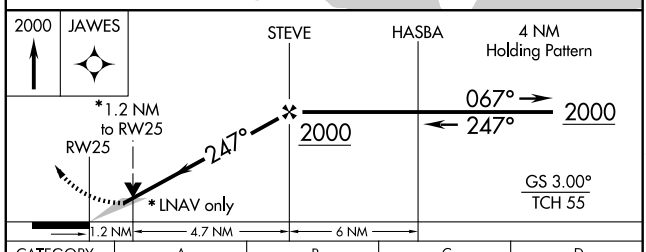
RNAV (GPS) RWY 25
NEWPORT NEWS / WILLIAMSBURG INTL (PHF)

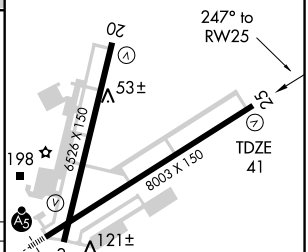
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F).

MISSED APPROACH: Climb to 2000 direct JAWES and hold.

ATIS	NORFOLK APP CON	NEWPORT NEWS TOWER ★	GND CON	CLNC DEL	UNICOM
128.65	125.7	118.7 (CTAF) L 257.9	121.9 348.6	121.65 225.4	122.95







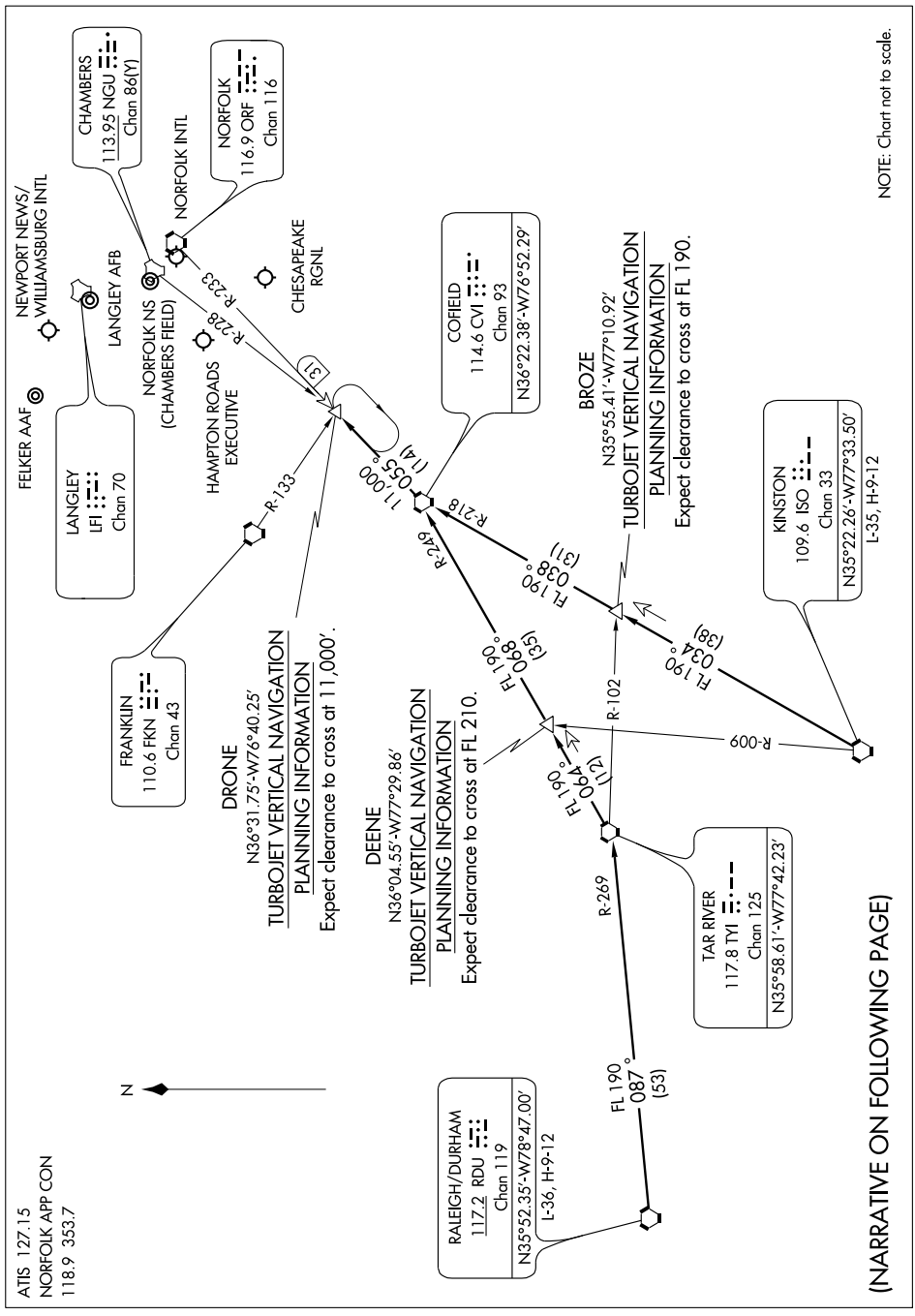
CATEGORY	A	B	C	D
LPV DA	420-1¼ 379 (400-1¼)			
LNAV/VNAV DA	480-1½ 439 (500-1½)			
LNAV MDA	460-1 419 (500-1)		460-1¼ 419 (500-1¼)	
CIRCLING	540-1½ 497 (500-1½)			600-2 557 (600-2)

REIL Rwy 25 L
REIL Rwy 20
HIRL Rwys 2-20 and 7-25

NE-3. 14 JAN 2010 to 11 FEB 2010

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

NORFOLK, VIRGINIA

AL-6488 (FAA)

LOC/DME I-EYK	APP CRS	Rwy ldg 5500
111.7	046°	TDZE 20
Chan 54		Apt Elev 20

ILS RWY 5

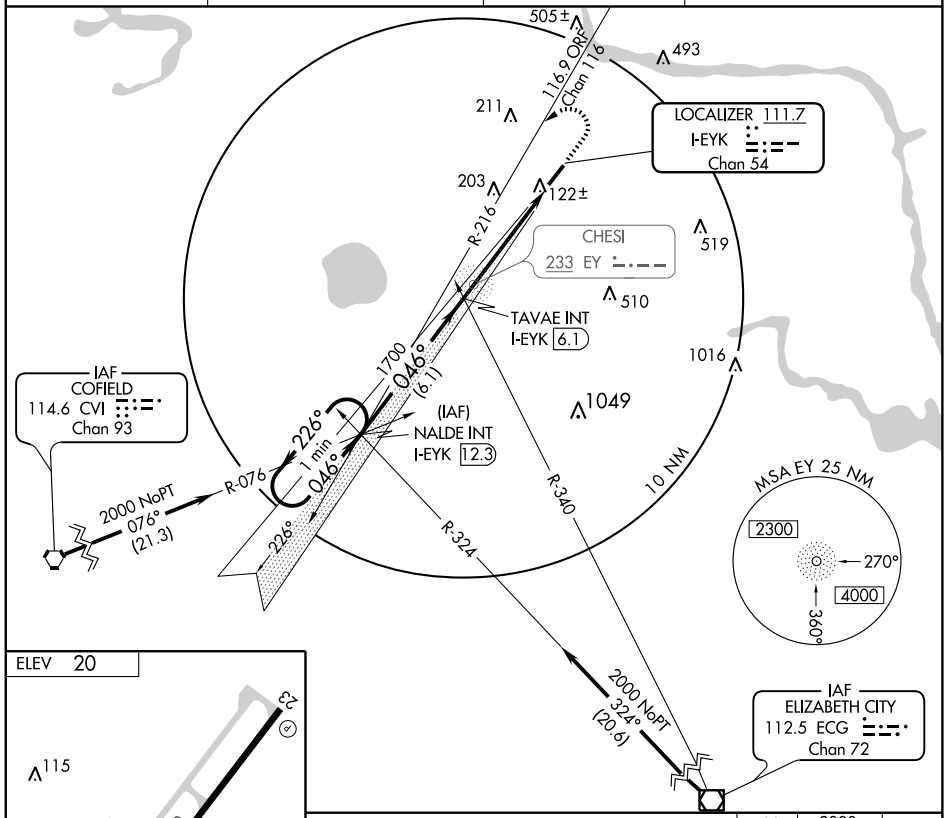
NORFOLK / CHESAPEAKE RGNL (CPK)

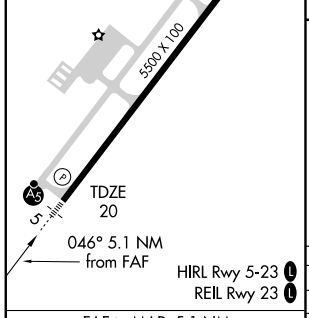
NA

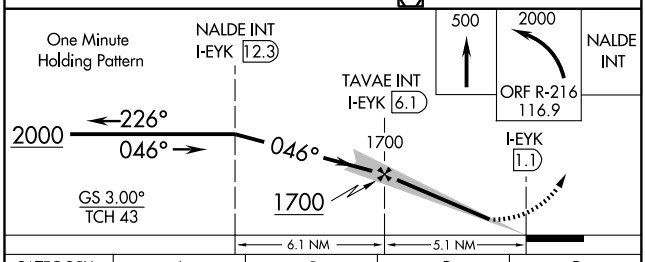
MALSR

MISSED APPROACH: Climb to 500 then climbing left turn to 2000, via ORF R-216 to NALDE Int/I-EYK 12.3 DME and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
123.675	118.9 353.7	135.075	123.05 (CTAF) L







FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-ILS 5	220-½ 200 (200-½)			NA
S-LOC 5	380-½ 360 (400-½)			NA
CIRCLING	440-1 420 (500-1)	480-1 460 (500-1)	480-1½ 460 (500-1½)	NA

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5500
043°	TDZE	20
	Apt Elev	20

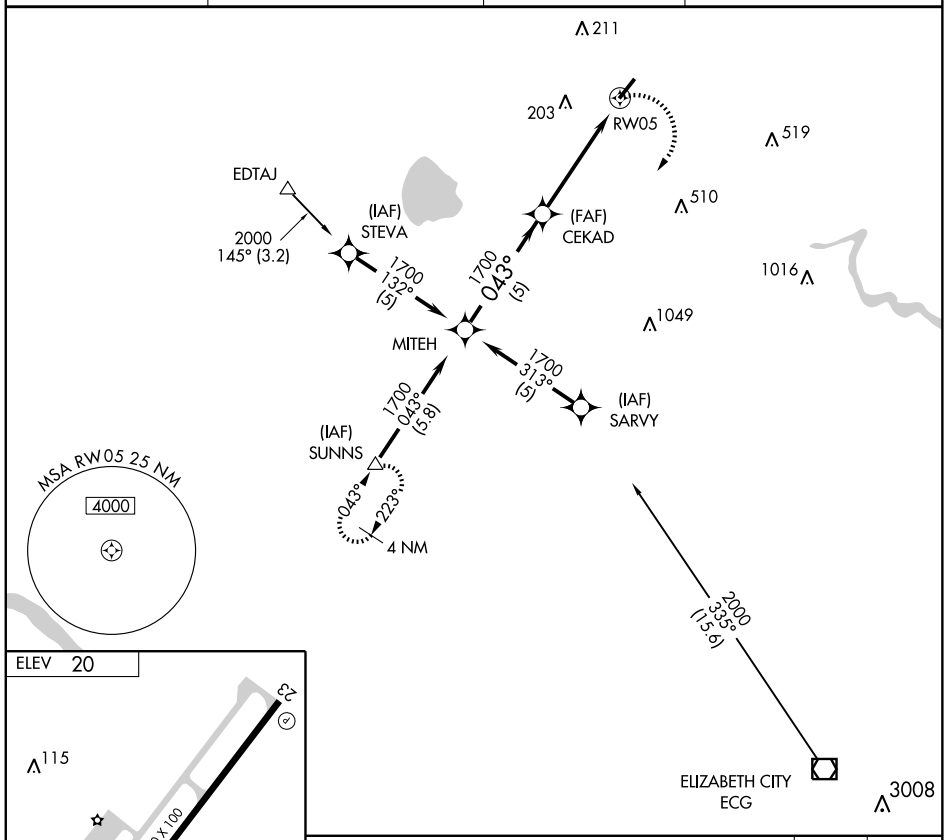
RNAV (GPS) RWY 5
NORFOLK / CHESAPEAKE RGNL (CPK)

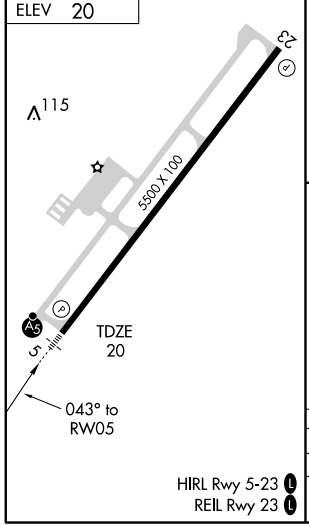
Inoperative table does not apply.
DME/DME RNP-0.3 NA.

MALSR

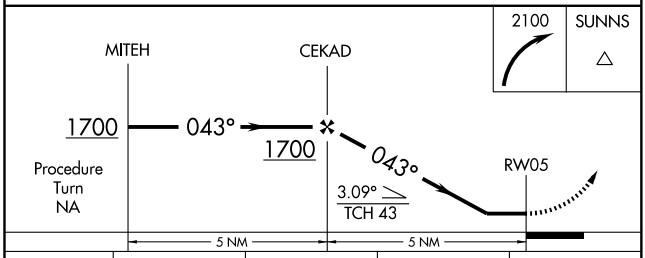
MISSED APPROACH: Climbing right turn to 2100 direct SUNNS and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
123.675	118.9 353.7	135.075	123.05 (CTAF) L





HIRL Rwy 5-23 L
REIL Rwy 23 L

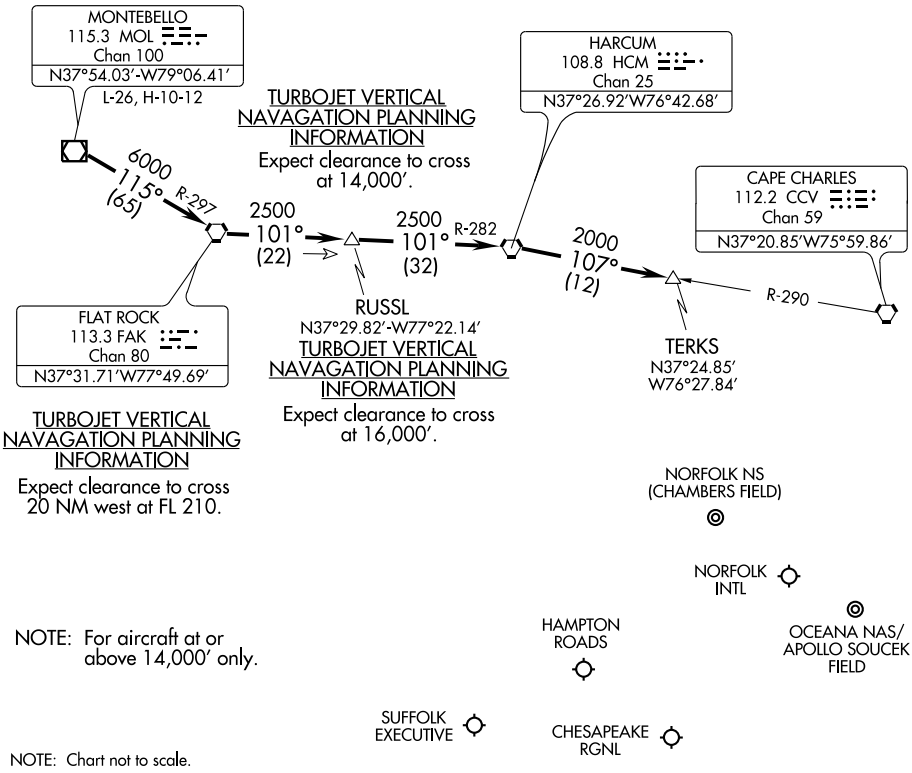


CATEGORY	A	B	C	D
LNAV MDA	420-1	400 (400-1)	NA	
CIRCLING	420-1 400 (400-1)	480-1 460 (500-1)	NA	

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.

VORTAC ORF 116.9 Chan 116	APP CRS 210°	Rwy ldg 5500 TDZE 20 Apt Elev 20

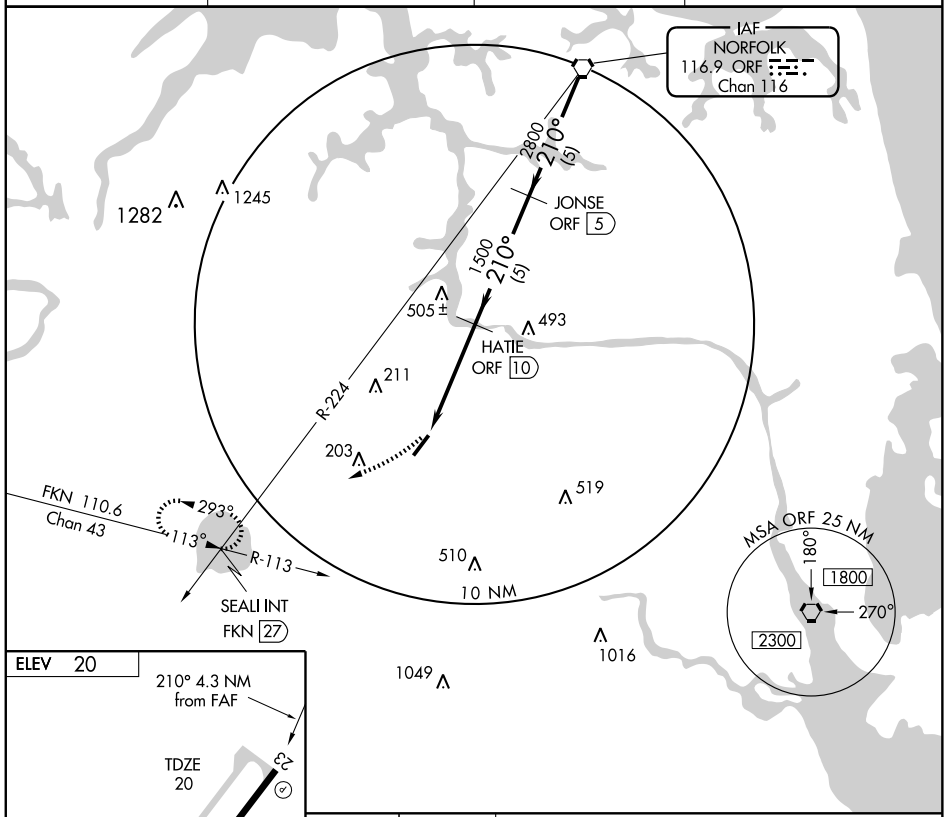
VOR/DME RWY 23

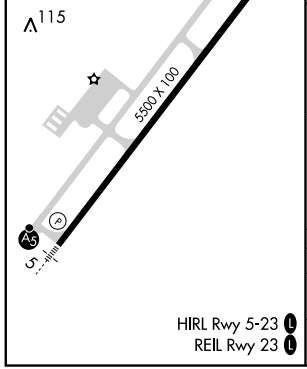
NORFOLK / CHESAPEAKE RGNL (CPK)

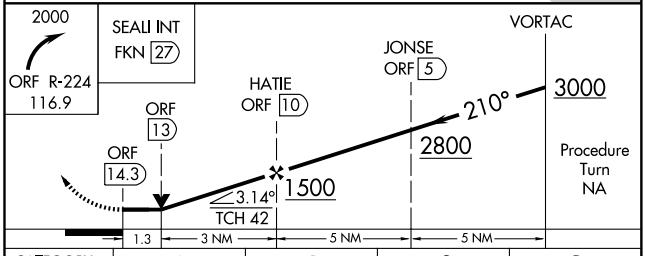
NA

MISSED APPROACH: Climbing right turn to 2000 via ORF R-224 to SEALI Int/FKN 27 DME and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
123.675	118.9 353.7	135.075	123.05 (CTAF) L

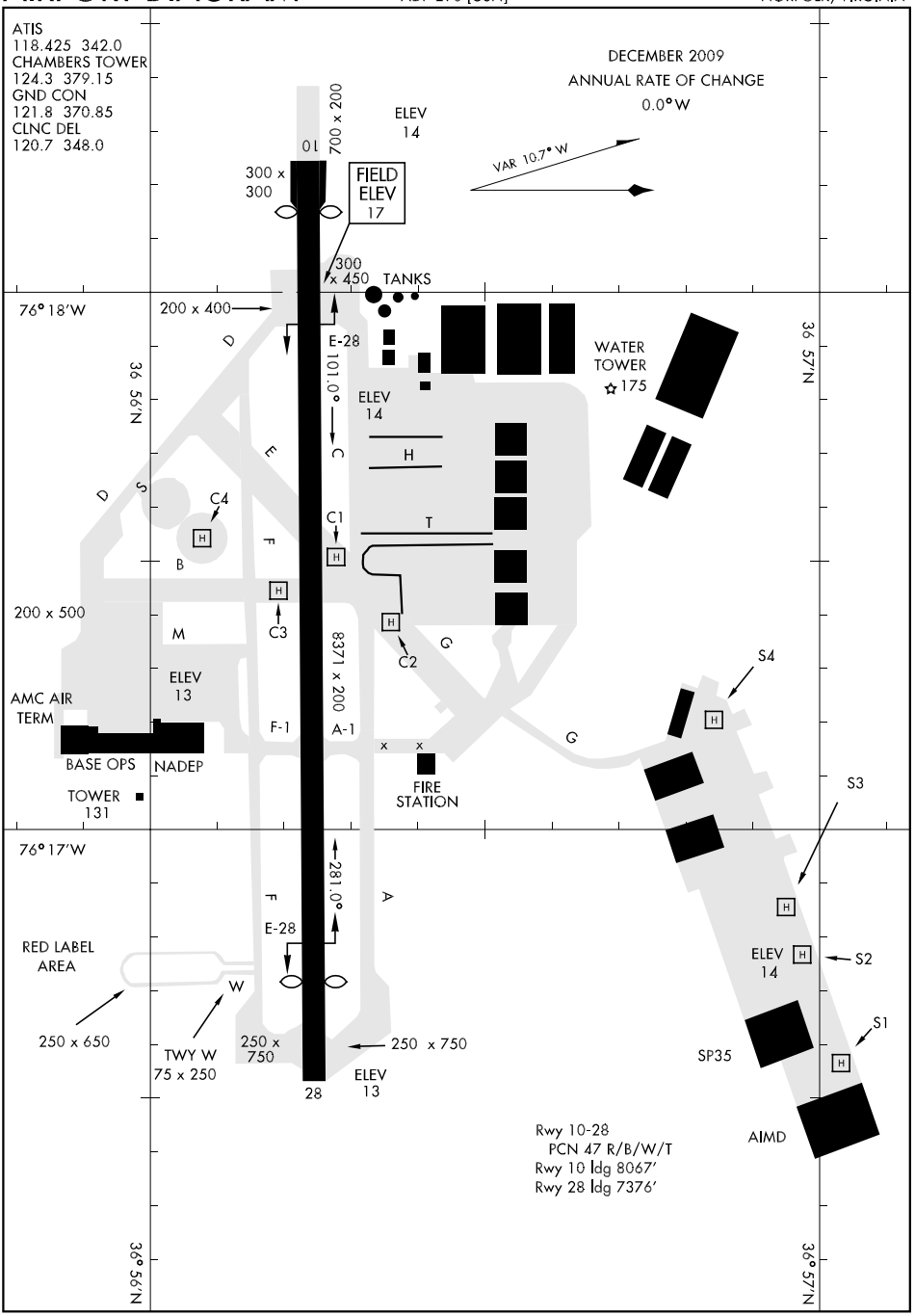






CATEGORY	A	B	C	D
S-23	480-1 460 (500-1)		480-1¼ 460 (500-1¼)	480-1½ 460 (500-1½)
CIRCLING	480-1 460 (500-1)		480-1½ 460 (500-1½)	580-2 560 (600-2)

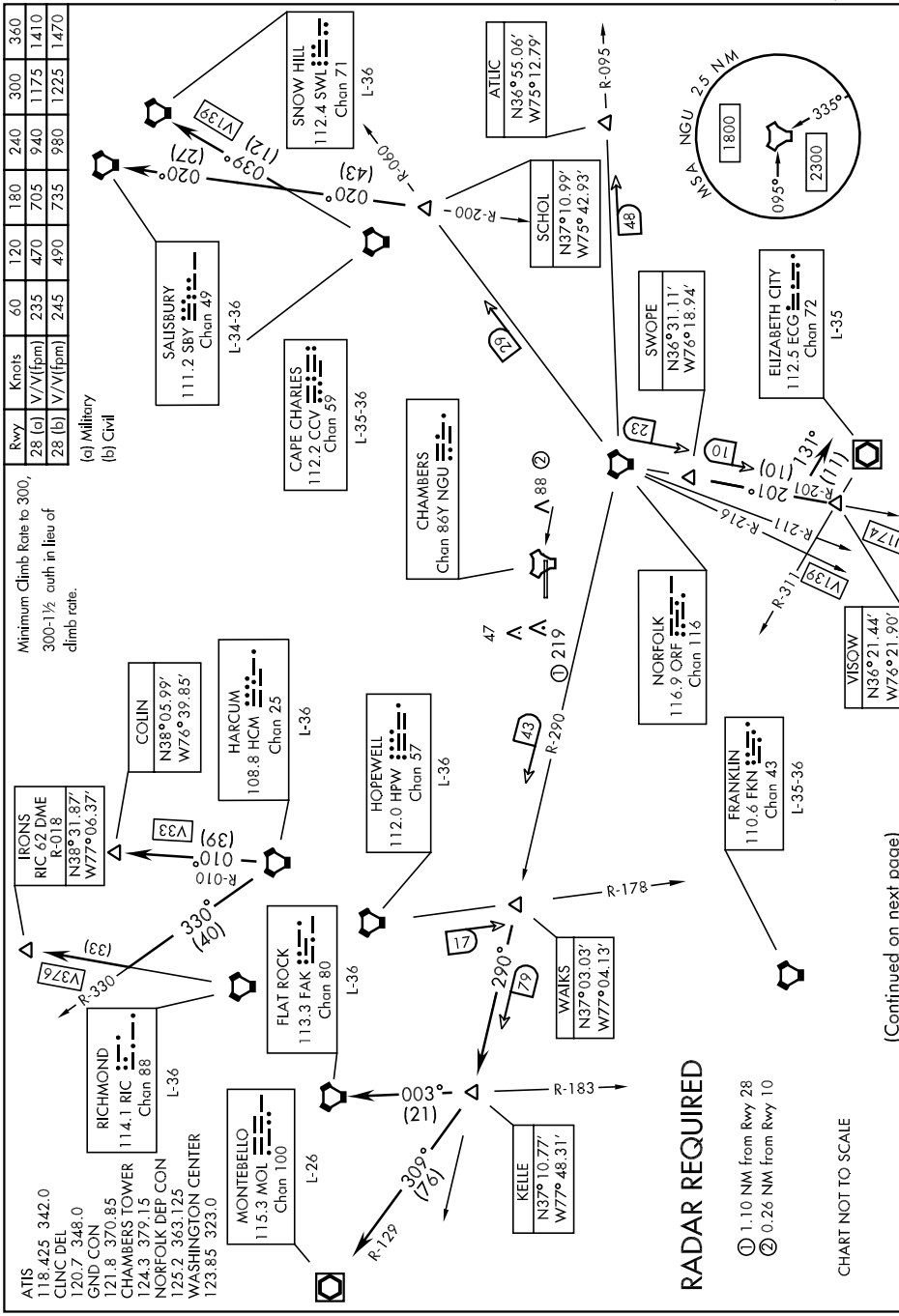
HIRL Rwy 5-23 L
REIL Rwy 23 L


ATIS
118.425 342.0
CHAMBERS TOWER
124.3 379.15
GND CON
121.8 370.85
CLNC DEL
120.7 348.0
DECEMBER 2009
ANNUAL RATE OF CHANGE
0.0°W
VAR 10.7° W
ELEV
14
10
7000 x 200
300 x
300
FIELD
ELEV
17
300
x 450
TANKS
76° 18'W
200 x 400
E-28
101.0°
WATER
TOWER
175
36 57'N
36 56'N
ELEV
14
H
C4
C1
T
B
200 x 500
M
C3
C2
G
8371 x 200
ELEV
13
AMC AIR
TERM
F-1
A-1
S4
BASE OPS
NADEP
FIRE
STATION
TOWER
131
S3
76° 17'W
281.0°
A
E-28
RED LABEL
AREA
W
ELEV
14
S2
250 x 650
TWY W
75 x 250
250 x
750
250 x 750
28
ELEV
13
SP35
S1
AIMD
Rwy 10-28
PCN 47 R/B/W/T
Rwy 10 ldg 8067'
Rwy 28 ldg 7376'
36° 56'N
36° 57'N

Rwy	Knots	60	120	180	240	300	360
28 (a)	V/V(fpm)	235	470	705	940	1175	1410
28 (b)	V/V(fpm)	245	490	735	980	1225	1470

(a) Military
(b) Civil

Minimum Climb Rate to 300, 300-1½ auth in lieu of climb rate.



(Continued on next page)

DEPARTURE ROUTE DESCRIPTION
(Continued)

TAKE-OFF RWY 10: Climbing left turn heading 050°, cross DER at or above 35′ AGL/48′ MSL, thence...
TAKE-OFF RWY 28: Climb via heading 280°, thence...

via radar vectors to assigned transition. Maintain 2000 or assigned altitude. Expect clearance to requested altitude/flight level 10 minutes after departure.

ATLIC TRANSITION (NGU7•ATLIC): Via vectors to ATLIC.

CAPE CHARLES TRANSITION (NGU7•CCV): Via vectors to CCV VORTAC. (NOTE: For altitudes 5000 and below).

ELIZABETH CITY TRANSITION (NGU7•ECG): Via vectors to SWOPE, then via ORF R-201 to VISOW (ORF R-201/33 DME), then direct ECG VOR/DME.

FLAT ROCK TRANSITION (NGU7•FAK): Via vectors to WAIKS, then via ORF R-290 to KELLE, then direct FAK VORTAC.

FRANKLIN TRANSITION (NGU7•FKN): Via vectors to FKN VORTAC*.

HARCUM TRANSITION (NGU7•HCM): Via vectors to HCM VORTAC**.

HOPEWELL TRANSITION (NGU7•HPW): Via vectors to HPW VORTAC.

MONTEBELLO TRANSITION (NGU7•MOL): Via vectors to WAIKS, then via ORF R-290 to KELLE, then intercept MOL R-129 to MOL VOR/DME.

SALISBURY TRANSITION (NGU7•SBY): Via vectors to SCHOL, then SBY R-200 to SBY VORTAC.

SNOW HILL TRANSITION (NGU7•SWL): Via vectors to SCHOL, thence SBY R-200 to V139 to SWL VORTAC.

V139 TRANSITION (NGU7•ORF): Via vectors to V139.

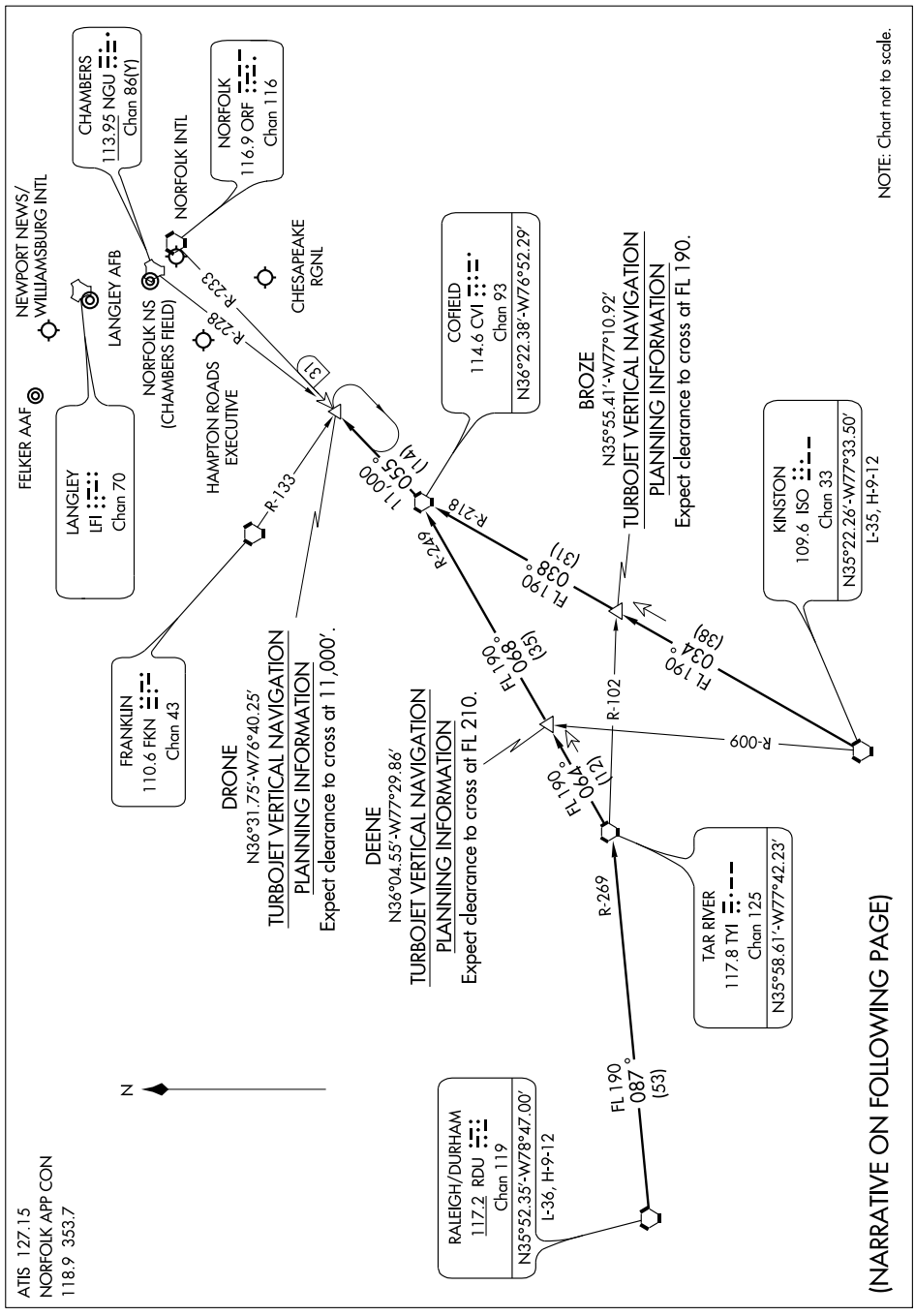
J174 TRANSITION (NGU7•ORF): Via vectors to J174.

*For routing to TYI/RDU/GSO:
**For routing to NHK/BWI/MTN/DCA METRO AREA via the following:
NHK-V33 COLIN V213 PXT. (NOTE For altitudes 7000 or 9000 only.)
BWI/MTN-V33 COLIN V213 PXT V93 GRACO. (NOTE: For altitudes 7000 or 9000 only.)
DCA/ADW/NSF/DAA-HCM R-330 V376 IRONS. (NOTE: For altitude 8000 only.)

NOTE: Transitions are part of the Preferred Departure Route (PDR) system and established as an Air Traffic flow procedure from the Norfolk Terminal Area. These fixes are to be used as the initial filing point out of NS Norfolk.

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

HI-TACAN RWY 10

TACAN	APCH CRS	Rwy ldg	8067
Chan 86Y	097°	TDZE	17
		Arpt Elev	17

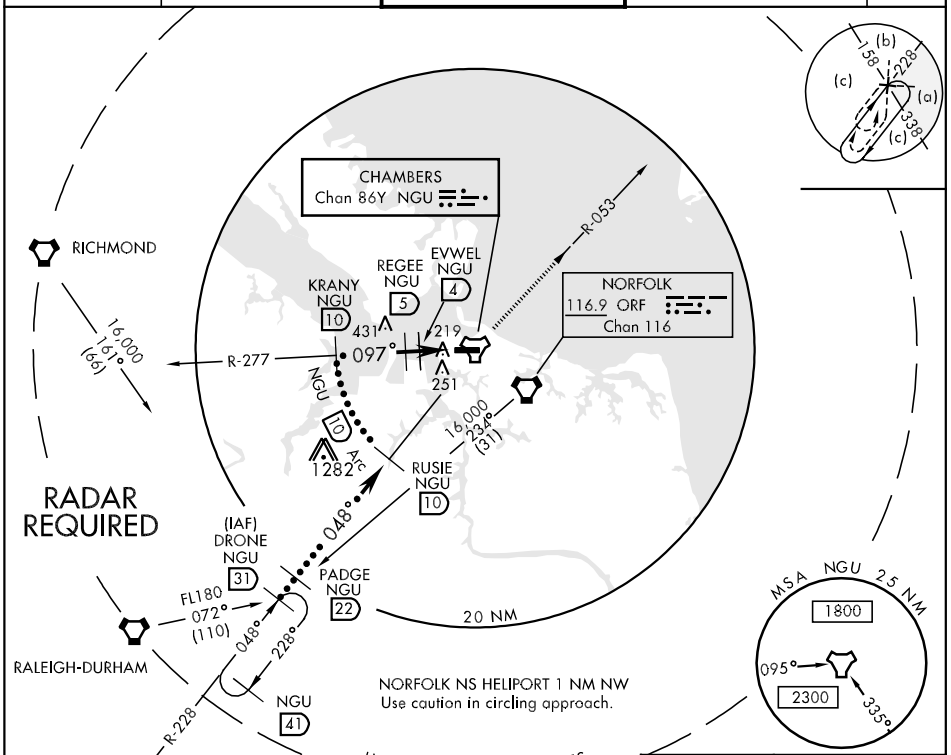
JAL-290 [USN] NORFOLK NS (CHAMBERS FIELD) (KNGU)

* When ALS inop, increase vis CAT C to 1¼ miles, CAT D to 1½ miles, CAT E to 1¾ miles.
** CAT E circling not auth S of RWY 10-28.

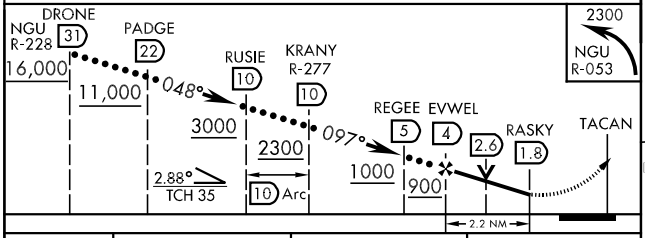
ALSF-2

MISSED APPROACH: Climbing left turn to 2300 via NGU R-053 then as directed by ATC.

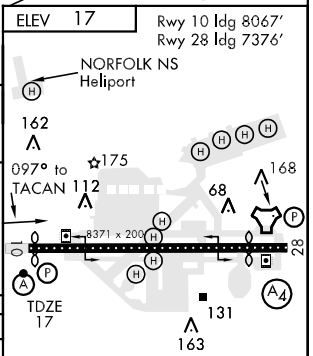
ATIS	NORFOLK APP CON	CHAMBERS TOWER	GND CON	ASR/PAR
118.425 342.0	118.9 353.7	124.3 379.15	121.8 370.85	



EMERG SAFE ALT 100 NM 2600



CATEGORY	C	D	E
S-10 *	480-¾ 463 (500-¾)	480-1 463 (500-1)	480-1¼ 463 (500-1¼)
CIRCLING **	520-1½ 503 (600-1½)	580-2 563 (600-2)	



TDZ/CL Rwy 10-28
REIL Rwy 10-28
HIRL Rwy 10-28

HI-TACAN RWY 28

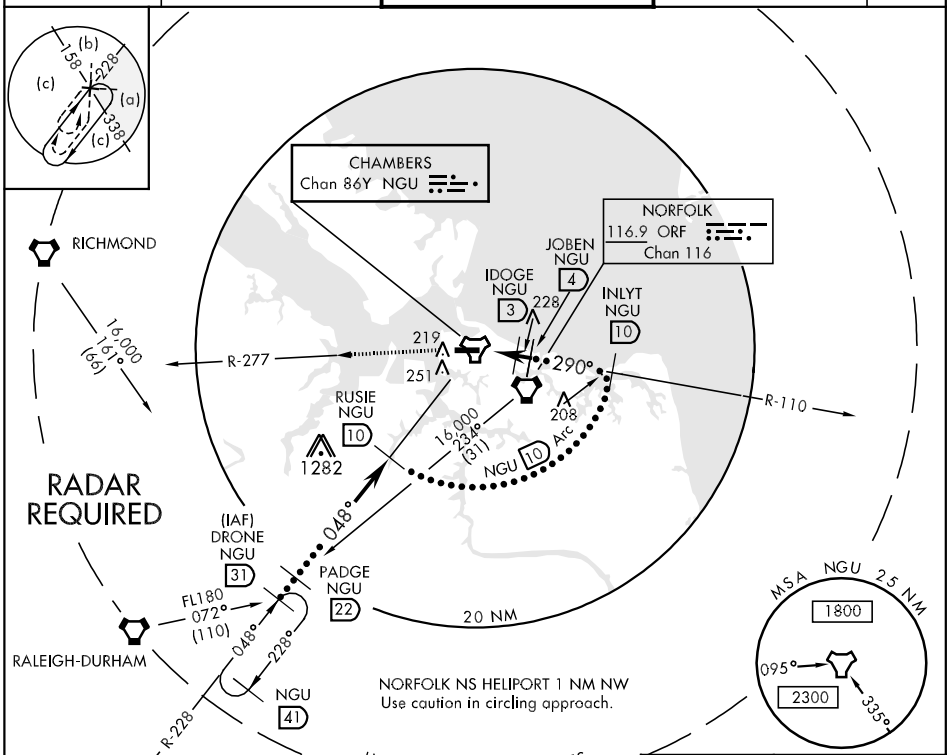
TACAN NGU Chan 86Y	APCH CRS 290°	Rwy ldg 7376 TDZE 15 Arpt Elev 17	JAL-290 [USN]	NORFOLK NS (CHAMBERS FIELD) (KNGU)

T * When ALS inop, increase CAT C vis to 1¼ miles, CAT DE to 1½ miles.
** CAT E circling not authorized S of Rwy 10-28.

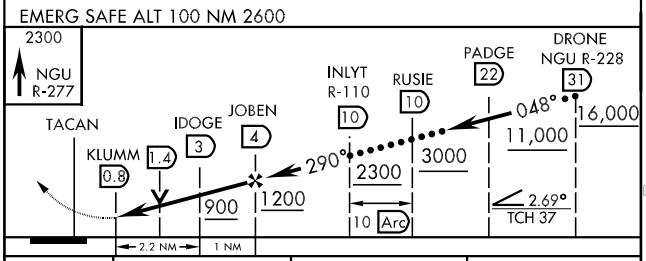
SSALS A4

MISSED APPROACH: Climb to 2300 via NGU R-277 then as directed by ATC.

ATIS	NORFOLK APP CON	CHAMBERS TOWER	GND CON	ASR/PAR
118.425 342.0	118.9 353.7	124.3 379.15	121.8 370.85	

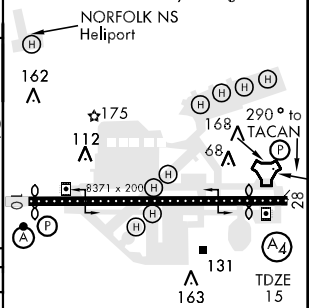


EMERG SAFE ALT 100 NM 2600



CATEGORY	C	D	E
S-28 *	460-1 445 (500-1)	460-1¼ 445 (500-1¼)	
CIRCLING**	520-1½ 503 (600-1½)	580-2 563 (600-2)	

ELEV 17
Rwy 10 ldg 8067′
Rwy 28 ldg 7376′



TDZ/CL Rwy 10-28
REIL Rwy 10-28
HIRL Rwy 10-28

NE-3, 14 JAN 2010 to 11 FEB 2010

ILS or LOC/DME RWY 10

LOC I-NGU	APCH CRS	Rwy ldg	8067
108.95	100°	TDZE	17
		Arpt Elev	17

AL-290 [USN]

NORFOLK NS (CHAMBERS FIELD) (KNGU)

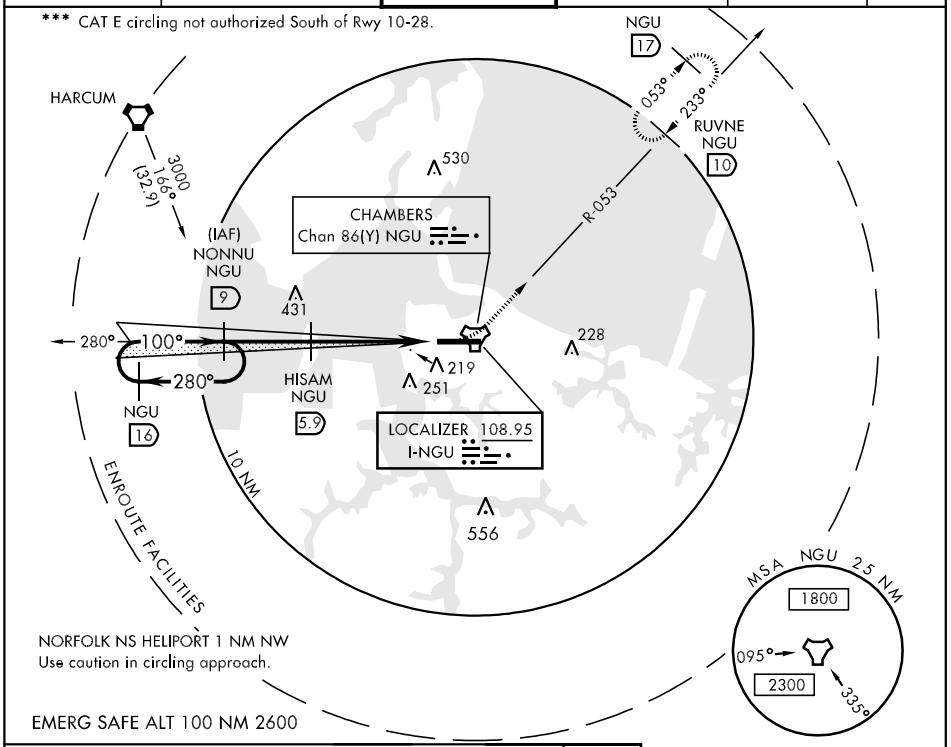
* When ALS inop, increase vis to ¾ mile.
** When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT DE to 1½ miles.

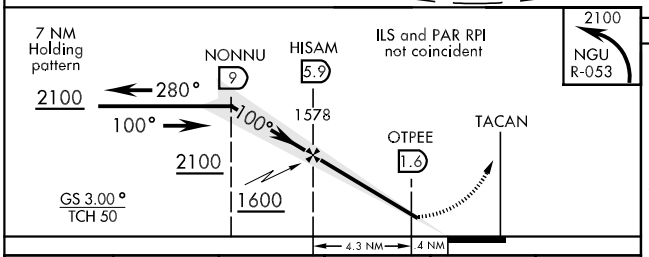
ALSF-2

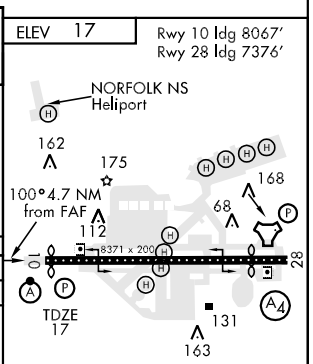
MISSED APPROACH: Climbing left turn to 2100 via NGU TACAN R-053 to RUVNE and hold.

ATIS	NORFOLK APP CON	CHAMBERS TOWER	GND CON	CLNC DEL	ASR/PAR
118.425 342.0	118.9 353.7	124.3 379.15	121.8 370.85	120.7 348.0	

*** CAT E circling not authorized South of Rwy 10-28.







CATEGORY	A	B	C	D	E
S-ILS 10 *	217-½ 200 (200-½)				
S-LOC 10 **	460-½ 443 (500-½)		460-¾ 443 (500-¾)	460-1 443 (500-1)	
CIRCLING ***	520-1 503 (600-1)		520-1½ 503 (600-1½)	580-2 563 (600-2)	

TDZ/CL Rwy 10-28
REIL Rwy 10-28
HIRL Rwy 10-28

TACAN RWY 10

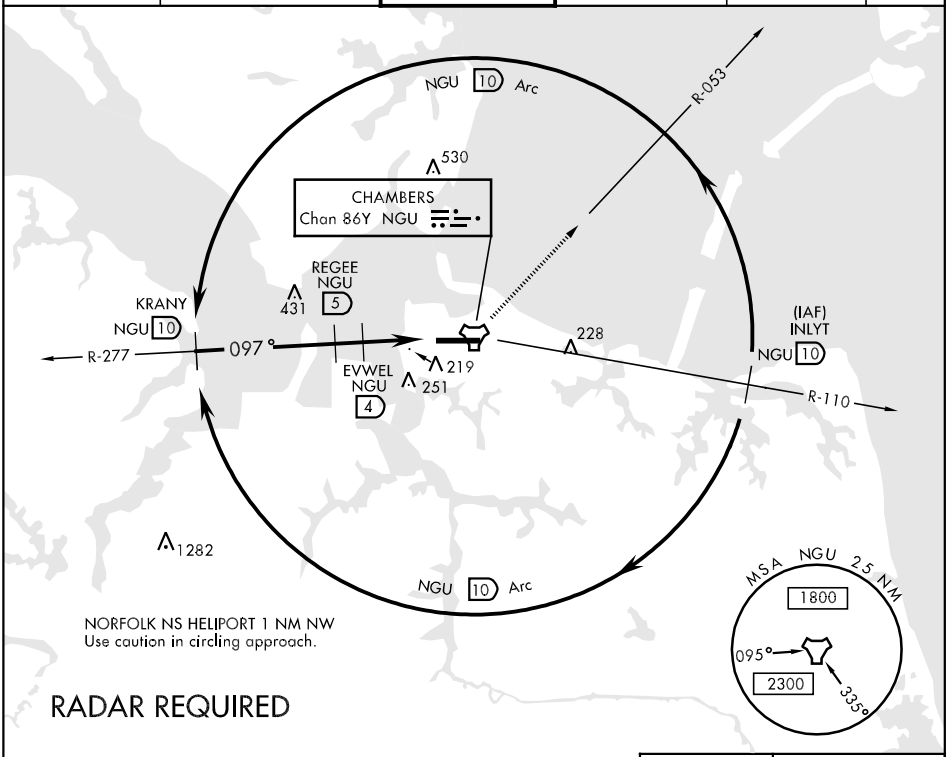
TACAN NGU Chan 86Y	APCH CRS 097°	Rwy ldg 8067 TDZE 17 Arpt Elev 17	AL-290 [USN]	NORFOLK NS (CHAMBERS FIELD) (KNGU)

* When ALS inop, increase CAT AB vis to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.

ALSF-2

MISSED APPROACH: Climbing left turn to 2300 via NGU TACAN R-053 then as directed by ATC.

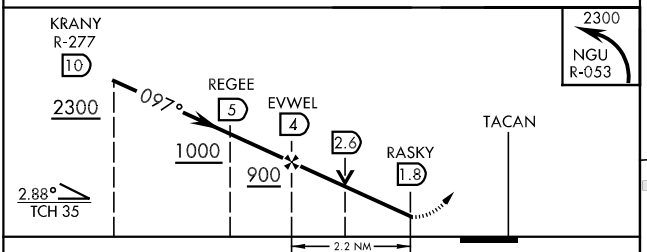
ATIS	NORFOLK APP CON	CHAMBERS TOWER	GND CON	CLNC DEL	ASR/PAR
118.425 342.0	118.9 353.7	124.3 379.15	121.8 370.85	120.7 348.0	

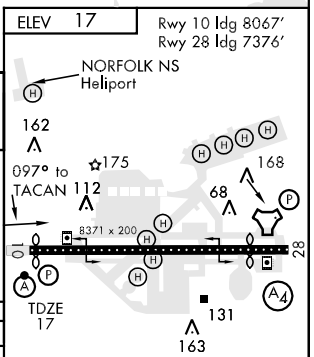


NORFOLK NS HELIPORT 1 NM NW
Use caution in circling approach.

RADAR REQUIRED

EMERG SAFE ALT 100 NM 2600





TDZ/CL Rwy 10-28
REIL Rwy 10-28
HIRL Rwy 10-28

CATEGORY	A	B	C	D
S-10 *	480-½ 463 (500-½)		480-¾ 463 (500-¾)	480-1 463 (500-1)
CIRCLING	520-1 503 (600-1)		520-1½ 503 (600-1½)	580-2 563 (600-2)

TACAN RWY 28

TACAN	NGU	APCH CRS	Rwy 28 ldg	7376
Chan	86Y	290°	TDZE	15
			Arpt Elev	17

AL-290 [USN]

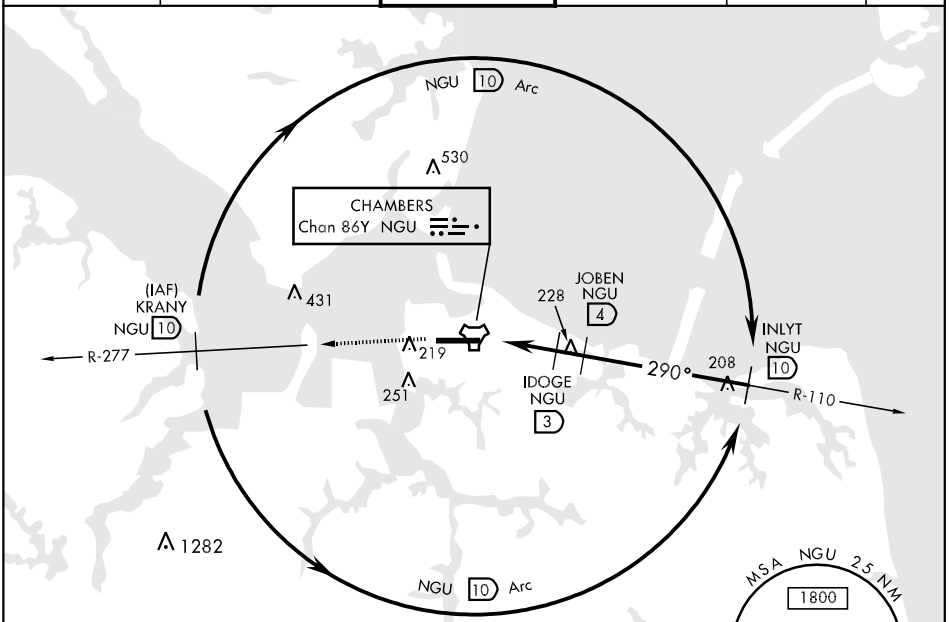
NORFOLK NS (CHAMBERS FIELD) (KNGU)

* When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.

SSALS A4

MISSED APPROACH: Climb to 2300 via NGU TACAN R-277 then as directed by ATC.

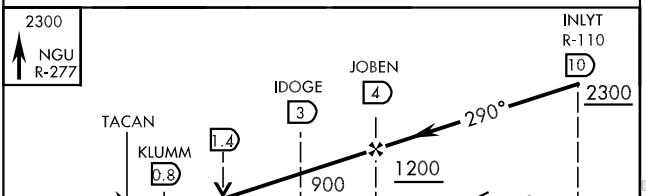
ATIS	NORFOLK APP CON	CHAMBERS TOWER	GND CON	CLNC DEL	ASR/PAR
118.425 342.0	118.9 353.7	124.3 379.15	121.8 370.85	120.7 348.0	

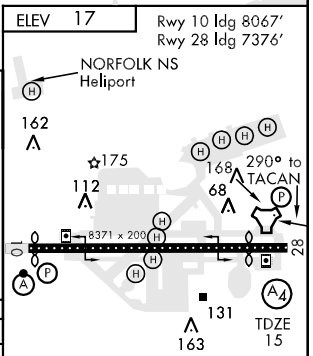


NORFOLK NS HELIPORT 1 NM NW
Use caution in circling approach.

RADAR REQUIRED

EMERG SAFE ALT 100 NM 2600





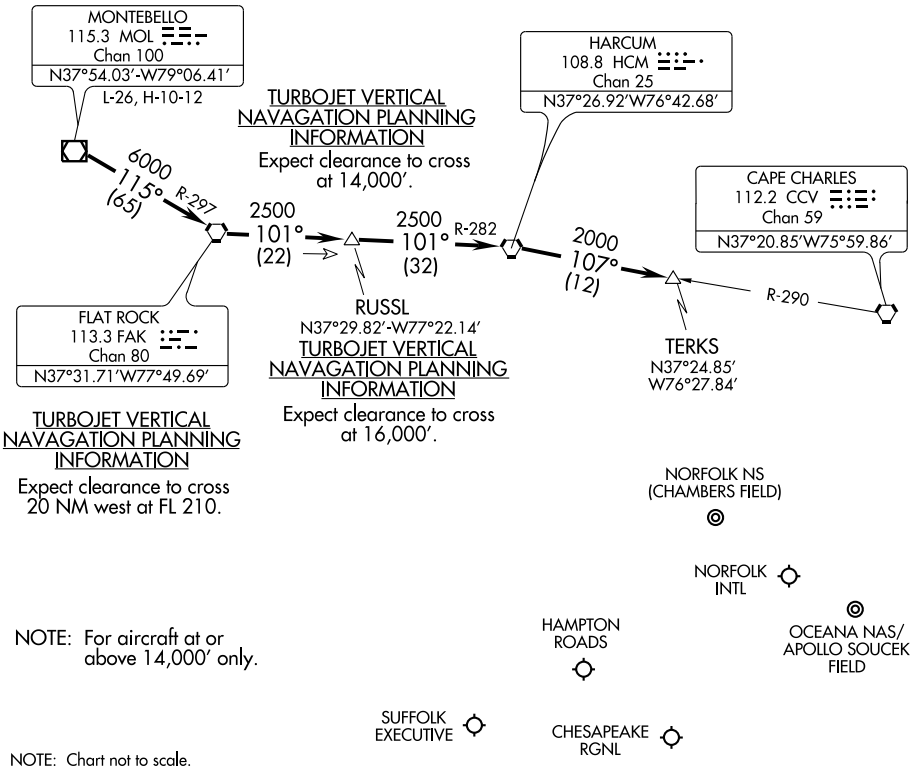
TDZ/CL Rwy 10-28
REIL Rwy 10-28
HIRL Rwy 10-28

CATEGORY	A	B	C	D
S-28 *	460-¾ 445 (500-¾)		460-1 445 (500-1)	460-1¼ 445 (500-1¼)
CIRCLING	520-1 503 (600-1)		520-1½ 503 (600-1½)	580-2 563 (600-2)

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

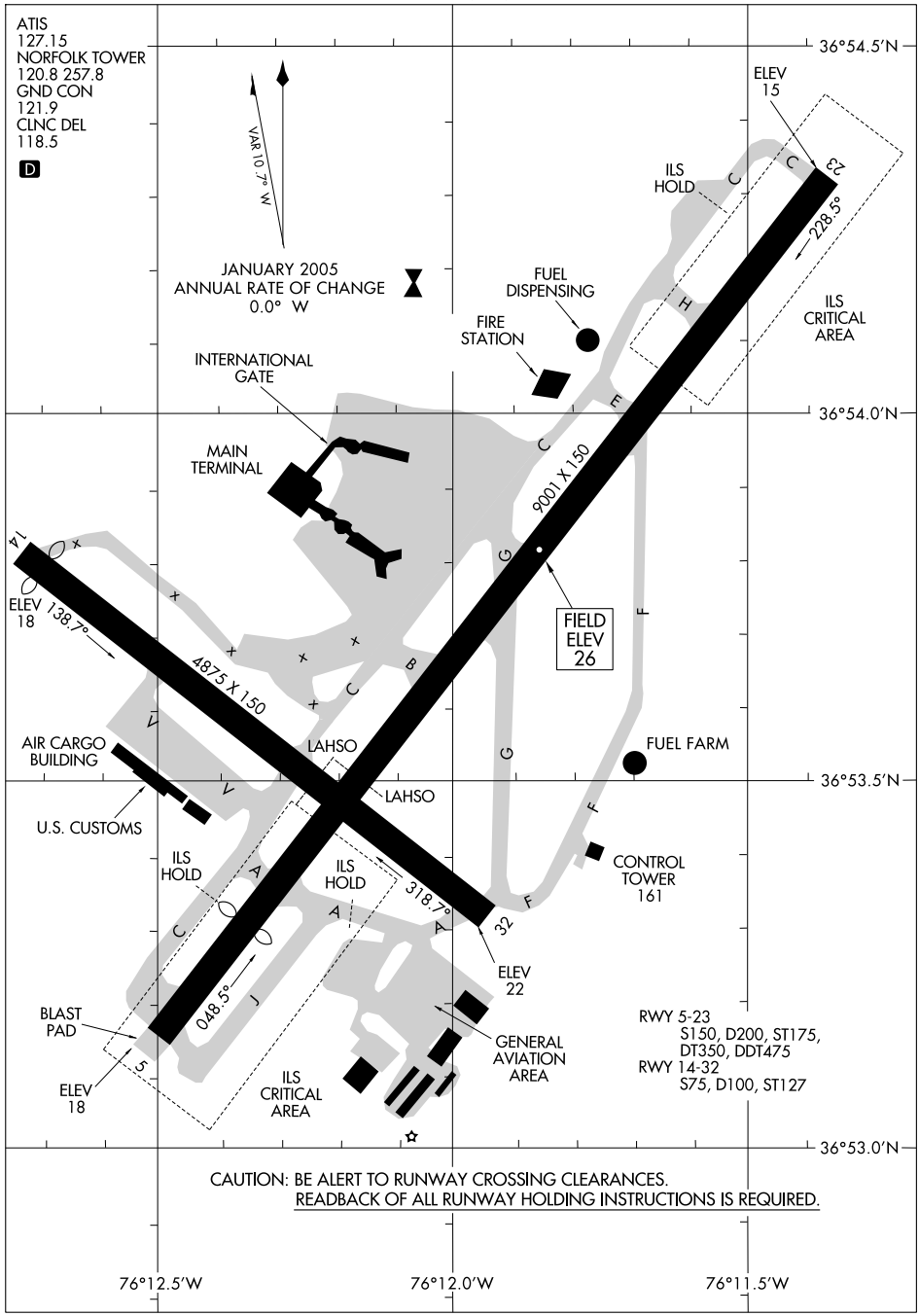
NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.

AIRPORT DIAGRAM

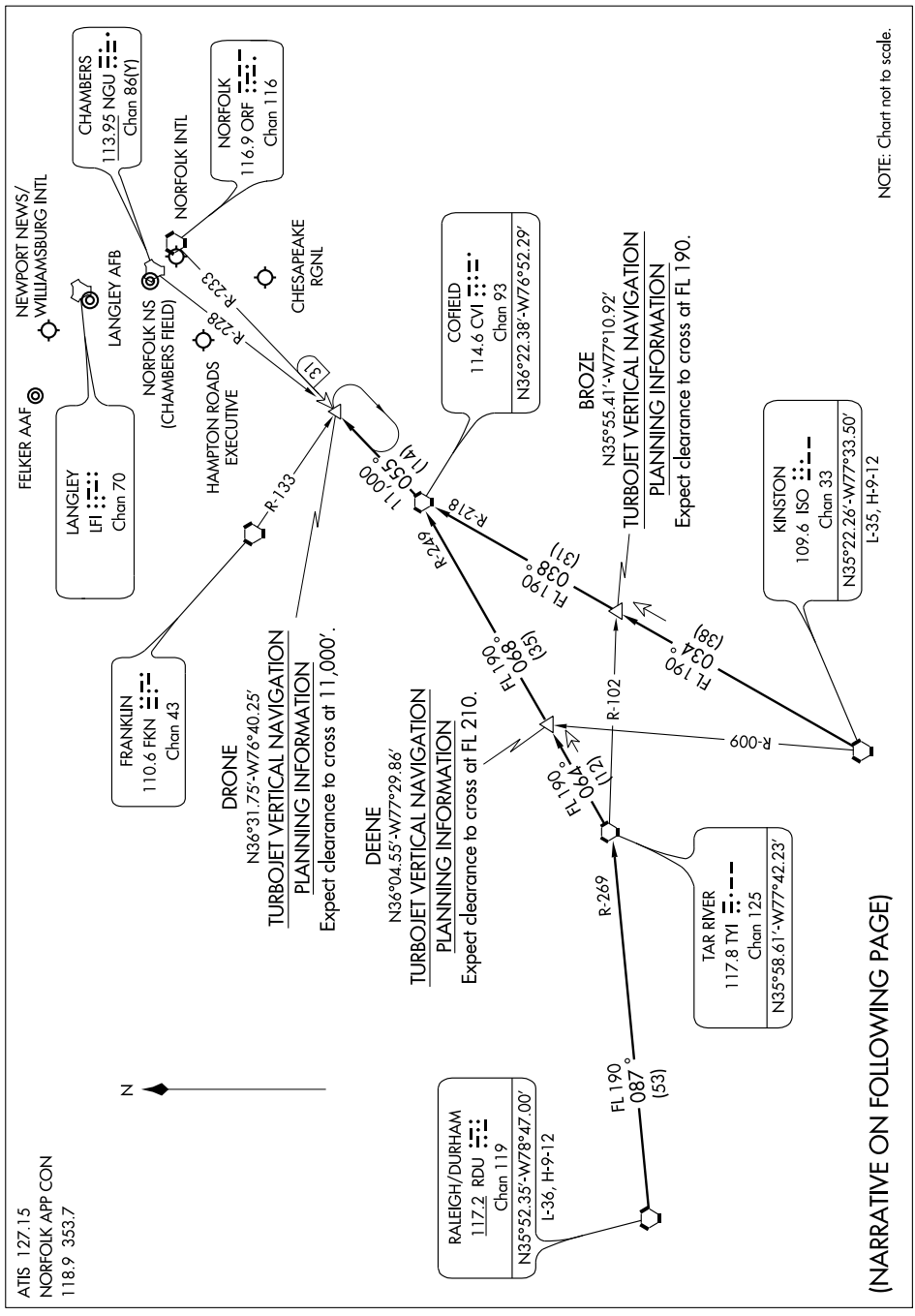
AL-291 (FAA)

NORFOLK INTL (ORF)
NORFOLK, VIRGINIA



DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-ORF	APP CRS	Rwy ldg	8001
109.1	047°	TDZE	26
Chan 28		Apt Elev	26

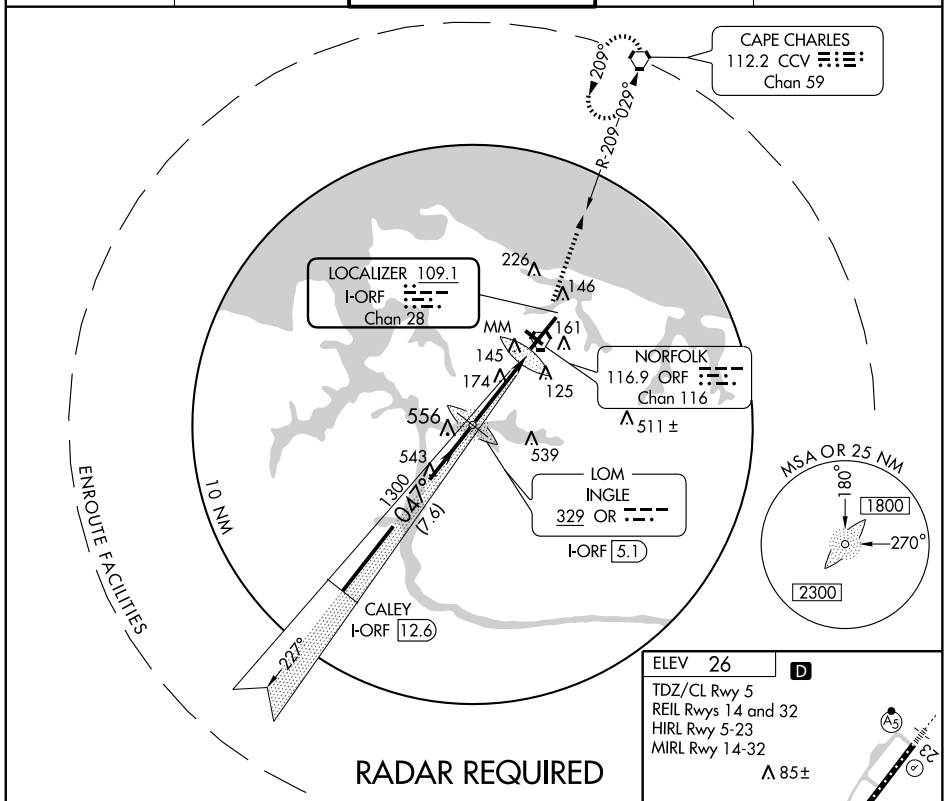
ILS or LOC RWY 5
NORFOLK INTL (ORF)

Autopilot coupled approach NA below 744.

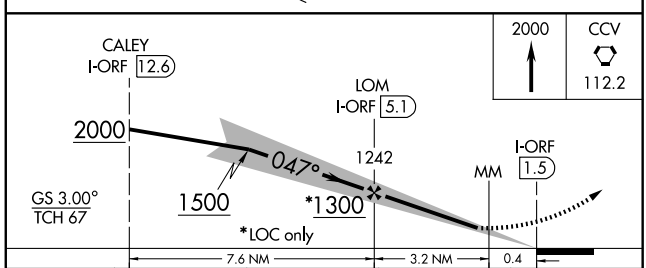
MALSR

MISSED APPROACH: Climb to 2000 direct CCV VORTAC and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5



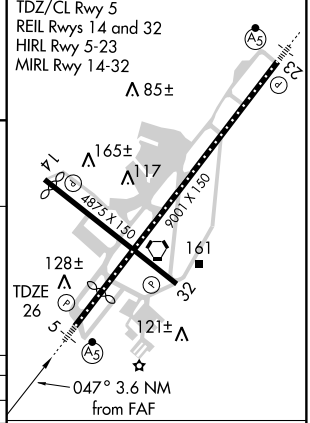
RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 5	236/18 210 (300-½)			
S-LOC 5	440/24 414 (500-½)		440/40 414 (500-¾)	
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

ELEV 26 D

TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32



FAF to MAP 3.6 NM

Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

LOC/DME I-JZQ	APP CRS	Rwy ldg	9001
109.1	227°	TDZE	26
Chan 28		Apt Elev	26

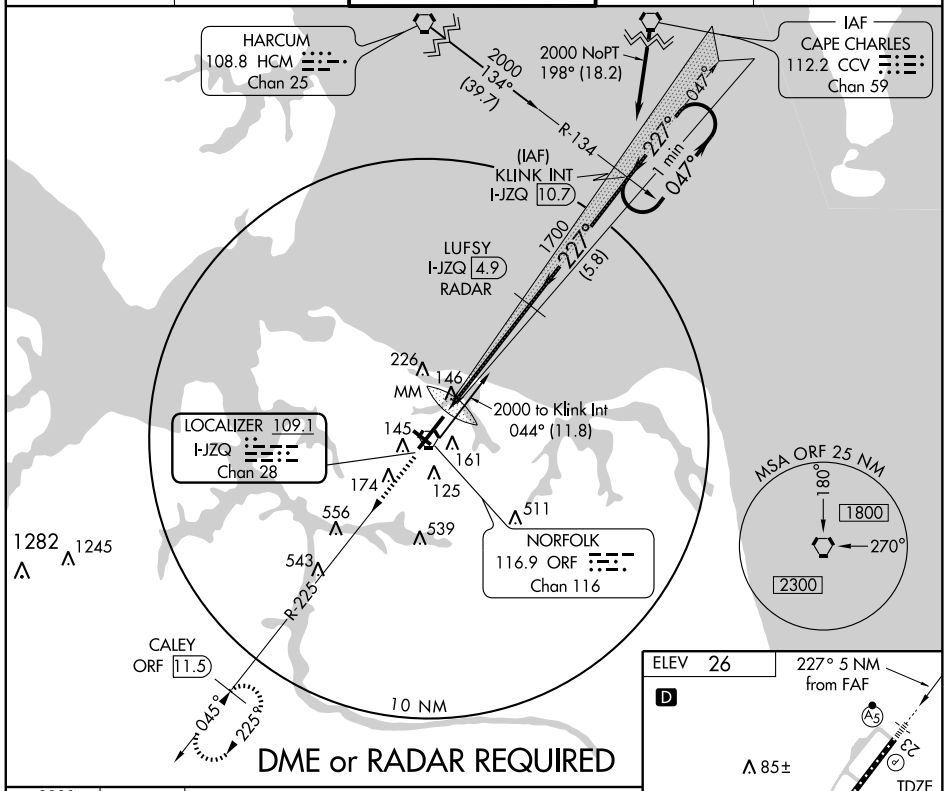
ILS RWY 23
NORFOLK INTL (ORF)

S-LOC Cats A, B, C, increase visibilities ¼ mile for inoperative MALSR.

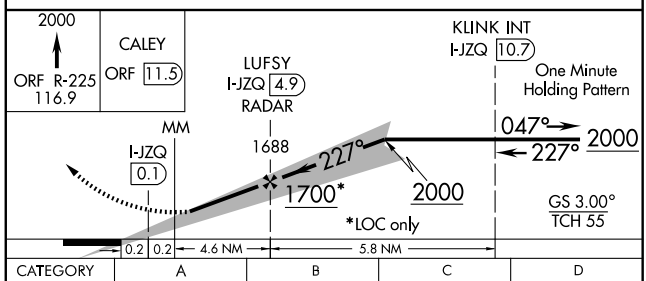
MALSR

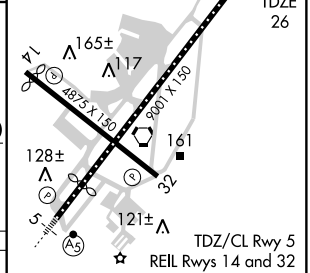
MISSED APPROACH: Climb to 2000 via ORF VORTAC R-225 to CALEY Int and hold.

ATIS	NORFOLK APP CON		NORFOLK TOWER		GND CON	CLNC DEL
127.15	118.9	353.7	120.8	257.8	121.9	118.5



DME or RADAR REQUIRED





CATEGORY	A	B	C	D
S-ILS 23	321-¾ 295 (300-¾)			
S-LOC 23	400-¾ 374 (400-¾)			400-1 374 (400-1)
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

FAF to MAP 4.8 NM

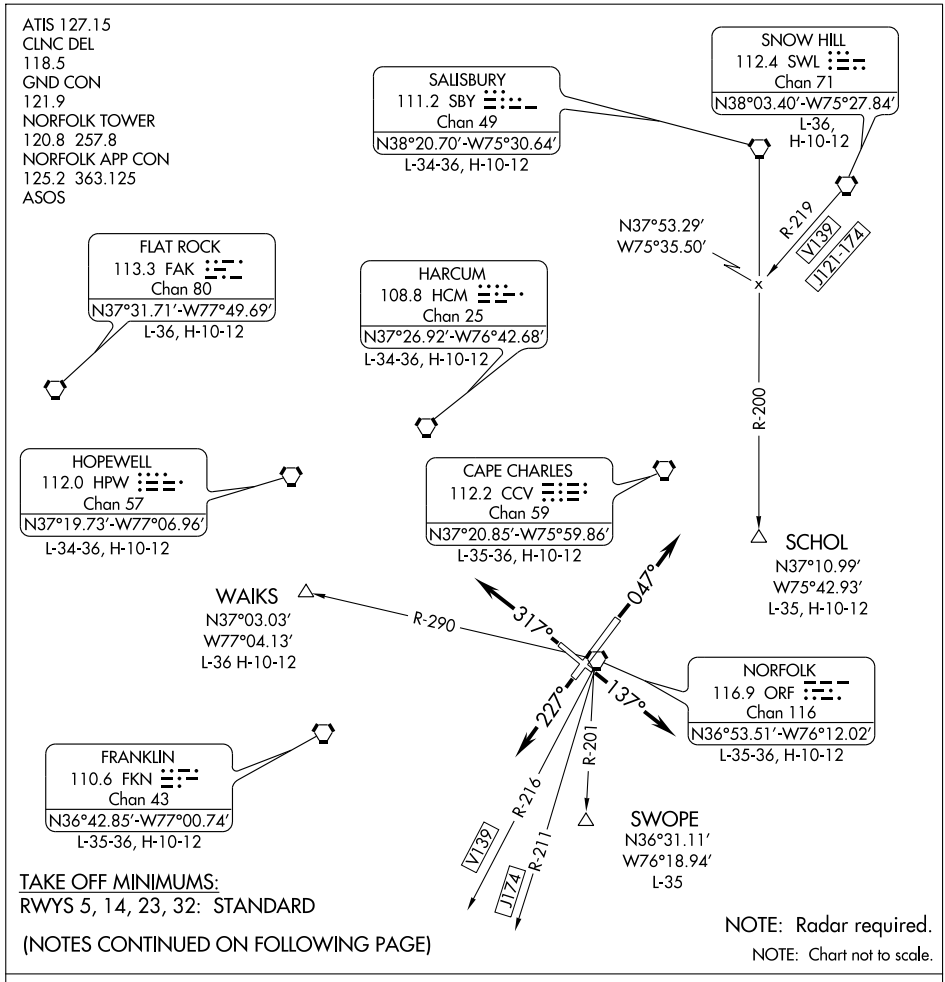
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

NE-3, 14 JAN 2010 to 11 FEB 2010

KISRR ONE DEPARTURE

NORFOLK INTL (ORF)
NORFOLK, VIRGINIA

ATIS 127.15
CLNC DEL
118.5
GND CON
121.9
NORFOLK TOWER
120.8 257.8
NORFOLK APP CON
125.2 363.125
ASOS



TAKE OFF MINIMUMS:
RWYS 5, 14, 23, 32: STANDARD

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Radar required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 5: Climb heading 047°. Expect radar vectors to assigned departure route/fix. Thence . . . .
TAKE-OFF RWY 14: Climb heading 137°. Expect radar vectors to assigned departure route/fix. Thence . . . .
TAKE-OFF RWY 23: Climb heading 227°. Expect radar vectors to assigned departure route/fix. Thence . . . .
TAKE-OFF RWY 32: Climb heading 317°. Expect radar vectors to assigned departure route/fix. Thence . . . .

. . . . maintain 4000 feet. Expect clearance to requested altitude 10 minutes after departure.

KISRR ONE DEPARTURE

TAKE-OFF OBSTACLES

Rwy 5: Mobile Crane 4091′ from DER, 1249′ right of centerline, 150′ AGL/163′ MSL. Multiple Ship Masts beginning 2761′ from DER, 22′ right of centerline, up to 100′ AGL/100′ MSL. Multiple Ship Masts beginning 2564′ from DER, 133′ left of centerline, up to 100′ AGL/ 100′ MSL. Obstruction light on Pole 3978′ from DER, 931′ left of centerline, 138′ AGL/146′ MSL. Multiple Towers beginning 4045′ from DER, 982′ left of centerline, up to 138′ AGL/146′ MSL. Obstruction Light on Pole 2898′ from DER, 811′ right of centerline, 84′ AGL/98′ MSL. Antenna 4115′ from DER, 1585′ right of centerline, 117′ AGL/ 131′ MSL. Tower 2974′ from DER, 772′ right of centerline, 90′ AGL/ 98′ MSL. Obstruction light on Pole 2696′ from DER, 1063′ left of centerline, 84′ AGL/91′ MSL. Bush 29′ from DER, 307′ right of centerline, 6′ AGL/20′ MSL. Tree 1459′ from DER, 159′ left of centerline, 41′ AGL/55′ MSL. Tower 2938′ from DER, 1254′ left of centerline, 89′ AGL/94′ MSL. Tree 1399 from DER, 201′ right of centerline, 38′ AGL/52′ MSL. Sign 82′ from DER, 301′ left of centerline, 2′ AGL/19′ MSL. Terrain 23′ from DER, 227′ left of centerline, 0′ AGL/17′ MSL.

Rwy 14: Tree 2541′ from DER, 432′ right of centerline, 101′ AGL/121′ MSL. Multiple Trees beginning 443′ from DER, 398′ left of centerline, up to 75′ AGL/95′ MSL. Pole 1410′ from DER, 254′ right of centerline, 45′ AGL/62′ MSL.

Rwy 23: Rod on Obstruction Light Pole 1012′ from DER, 650′ right of centerline, 56′ AGL/73′ MSL. Multiple Trees beginning 619′ from DER 584′ left of centerline, up to 81′ AGL/98′ MSL. Obstruction Light on Pole, 1433′ from DER, 738′ left of centerline, 54′ AGL/71′ MSL. Multiple Trees beginning 323′ from DER, 504′ right of centerline, up to 26′ AGL/43′ MSL. Pole 2165′ from DER, 840′ right of centerline, 57′ AGL/74′ MSL.

Rwy 32: Multiple Trees beginning 17′ from DER, 460′ right of centerline, up to 81′ AGL/98′ MSL. Multiple Trees and Poles beginning 60′ from DER, 333′ left of centerline, up to 87′ AGL/ 92′ MSL. Road 207′ from DER, 231′ right of centerline, 12′ AGL/29′ MSL. Multiple Obstruction Lights on Towers 201′ from DER, 135′ left of centerline, up to 12′AGL/27′ MSL.

RIVER VISUAL RWY 5

AL-291 (FAA)

NORFOLK INTL (ORF)
NORFOLK, VIRGINIA

ATIS 127.15
NORFOLK APP CON
118.9 353.7
NORFOLK TOWER
120.8 257.8
GND CON
121.9
CLINC DEL
118.5
UNICOM
122.95
ASOS

RADAR REQUIRED

Weather minimums: 2100 foot ceiling and 5 mile visibility.

NS
Norfolk

LOCALIZER 109.1
I-ORF
Chan 28

23
14
32
5

LOM
INGLE
329 OR

NORFOLK
116.9 ORF
Chan 116

A5

LAMBERTS
POINT
TERMINAL
2500
Recommended

047°

140°

ELIZABETH RIVER

553

Vertical Guidance Navaid
and Angle: I-ORF 3.00°

	1 NM	2	3	4	5	6

T

RIVER VISUAL RWY 5

PROCEDURE NOT AUTHORIZED AT NIGHT

RNAV (GPS) RWY 5
NORFOLK INTL (ORF)

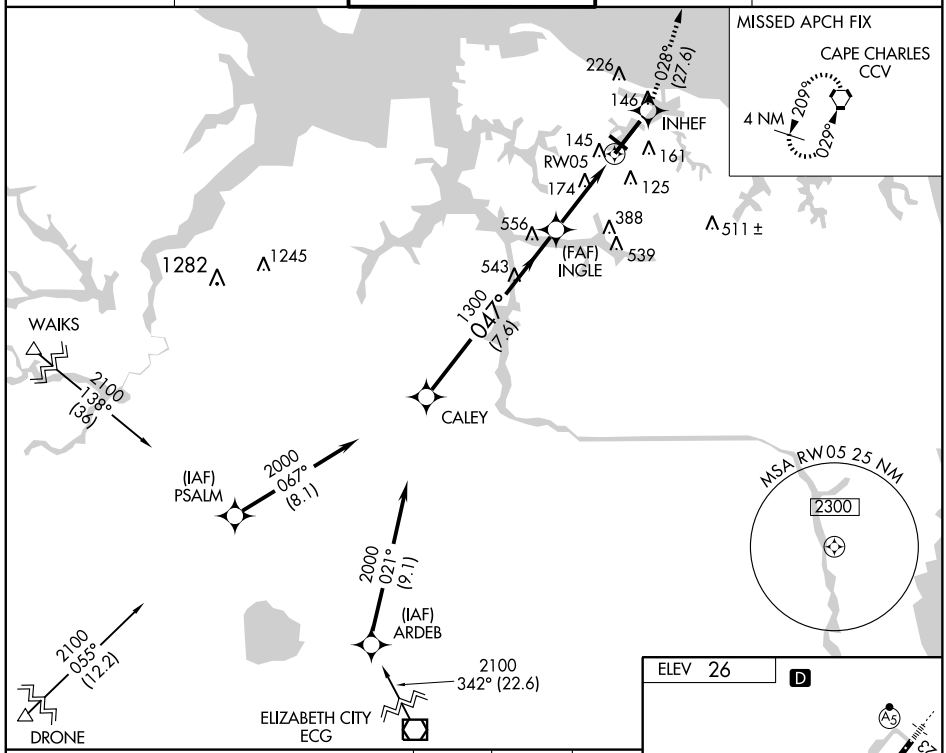
APP CRS	Rwy ldg	8001
047°	TDZE	26
	Apt Elev	26

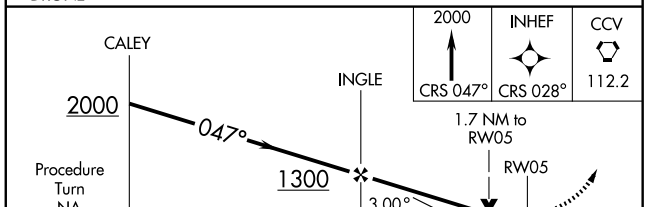
GPS or RNP-0.3 required.
NA
DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 2000 via 047° course to INHEF WP, then via 028° course to CCV VORTAC and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5





TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	640/24 614 (700-½)		640/60 614 (700-1¼)	640-1½ 614 (700-1½)
CIRCLING	640-1 614 (700-1)		640-1½ 614 (700-1½)	640-2 614 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4662
137°	TDZE	25
	Apt Elev	26

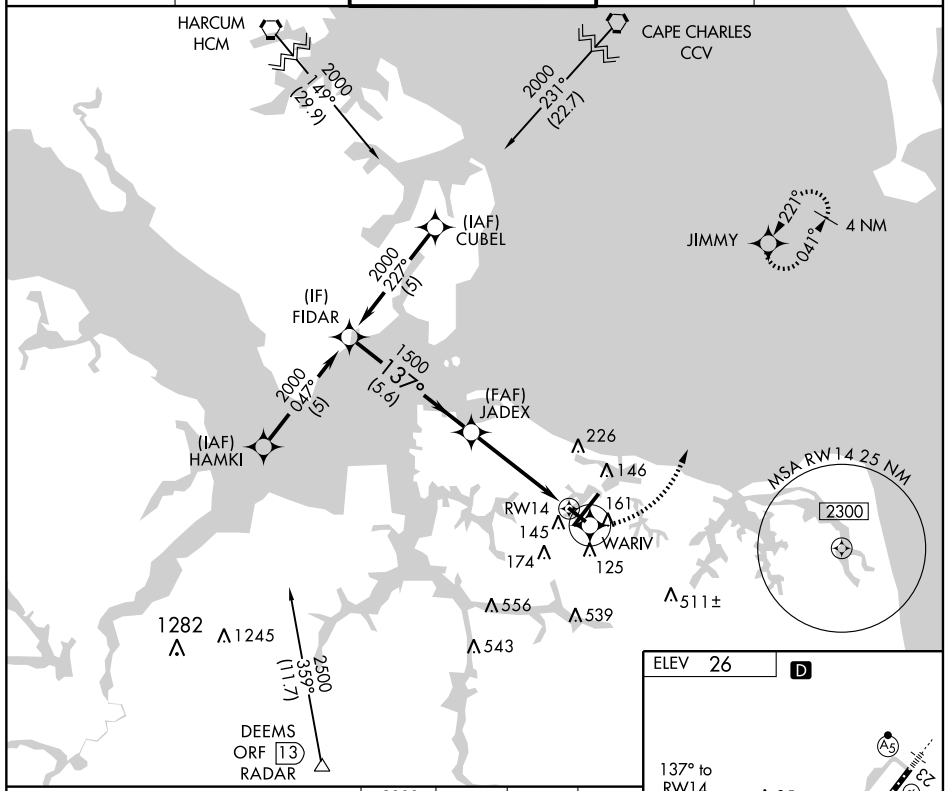
RNAV (GPS) RWY 14
NORFOLK INTL (ORF)

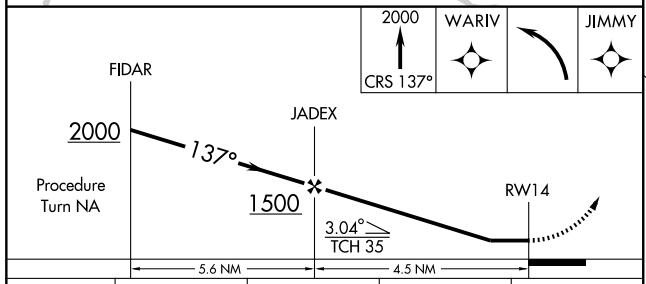
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

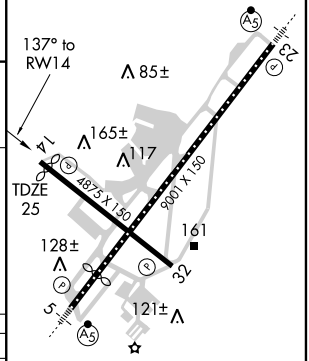
NA

MISSED APPROACH: Climb to 2000 via 137° course to WARIV WP then left turn direct JIMMY WP and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5







TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

CATEGORY	A	B	C	D
LNAV MDA	420-1 395 (400-1)			420-1¼ 395 (400-1¼)
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

APP CRS	Rwy ldg	9001
227°	TDZE	26
	Apt Elev	26

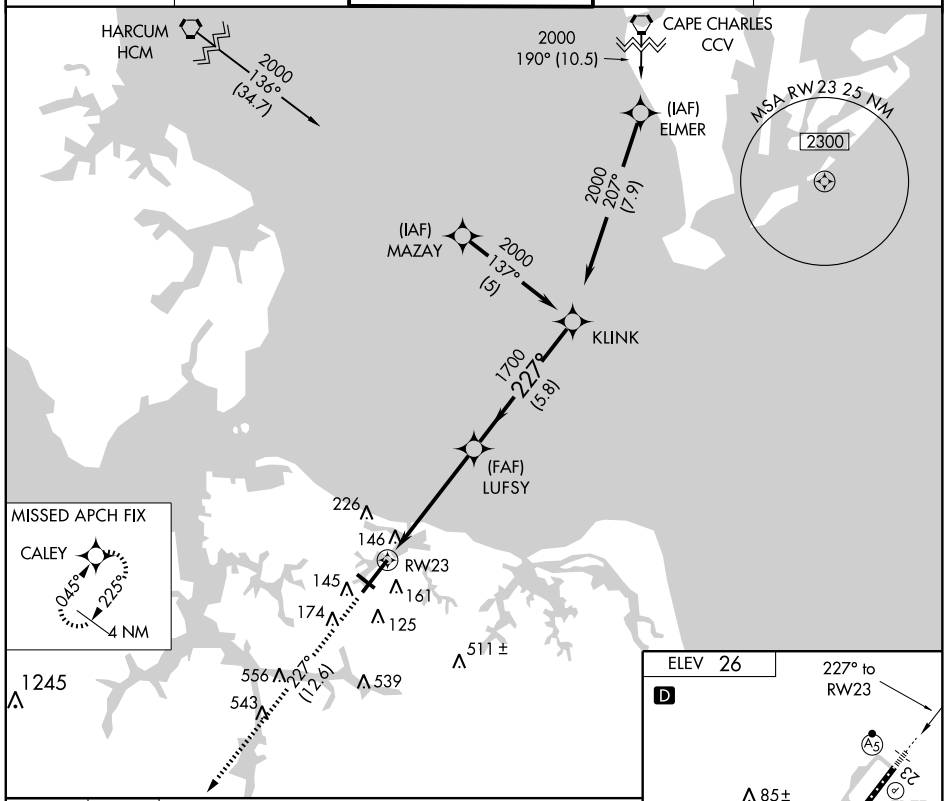
RNAV (GPS) RWY 23
NORFOLK INTL (ORF)

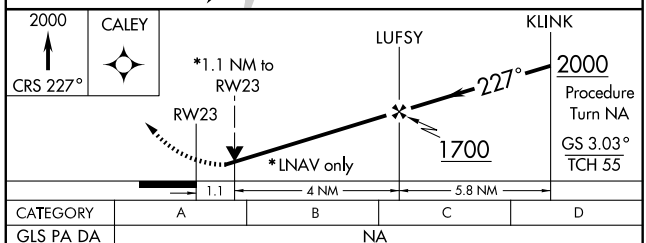
For inoperative MALSR increase LNAV/VNAV and LNAV Cat D visibility to 1¼ miles. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

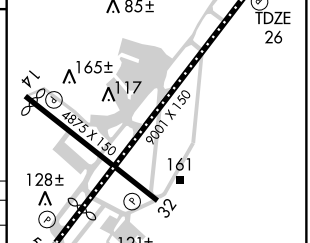
MALSR

MISSED APPROACH: Climb to 2000 via 227° course to CALEY WP and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	420 - ¾ 394 (400-¾)			420 - 1 394 (400-1)
LNAV MDA	420 - ¾ 394 (400-¾)			420 - 1 394 (400-1)
CIRCLING	520 - 1¼ 494 (500-1¼)		540 - 1½ 514 (600-1½)	580 - 2 554 (600-2)

TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

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APP CRS	Rwy ldg	4875
317°	TDZE	25
	Apt Elev	26

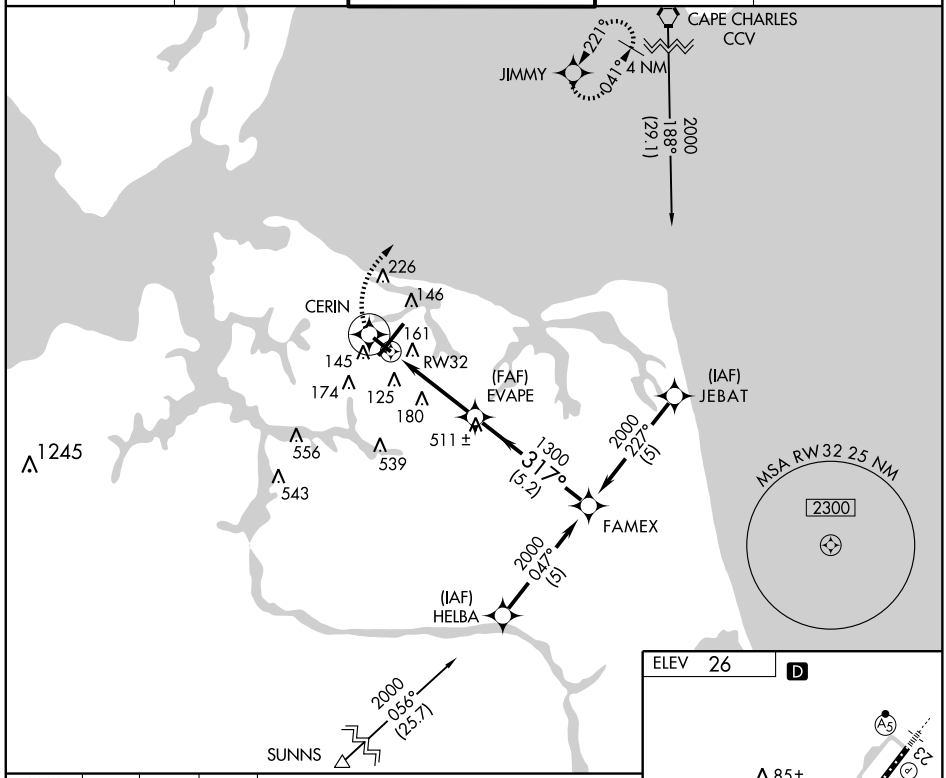
RNAV (GPS) RWY 32
NORFOLK INTL (ORF)

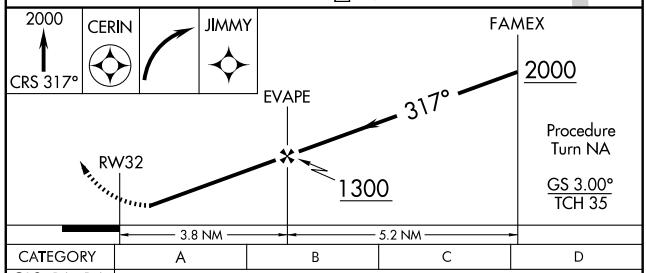
Baro-VNAV NA below -15°C (5°F).
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

NA

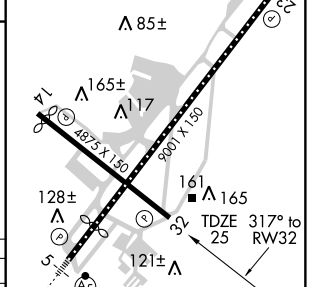
MISSED APPROACH: Climb to 2000 via 317° course to CERIN WP then right turn direct JIMMY WP and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	420-1½ 395 (400-1½)			
LNAV MDA	440-1 415 (500-1)		440-1¼ 415 (500-1¼)	
CIRCLING	520-1½ 494 (500-1½)		540-1½ 514 (600-1½)	580-2 554 (600-2)



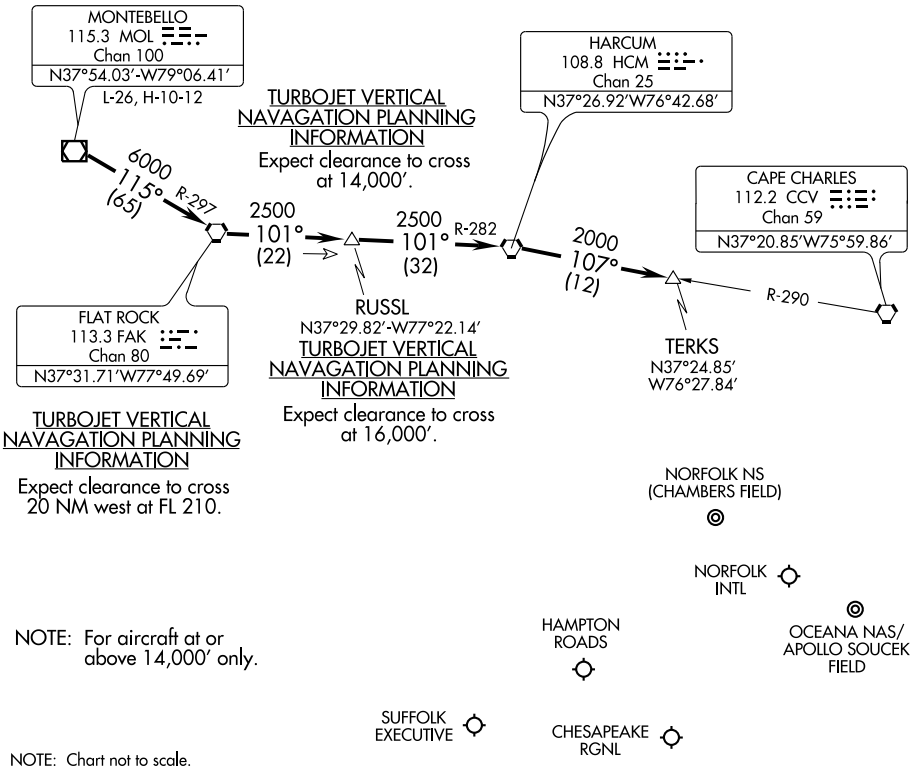
TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

NE-3. 14 JAN 2010 to 11 FEB 2010

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.

VORTAC ORF 116.9 Chan 116	APP CRS 053°	Rwy ldg 8001 TDZE 26 Apt Elev 26

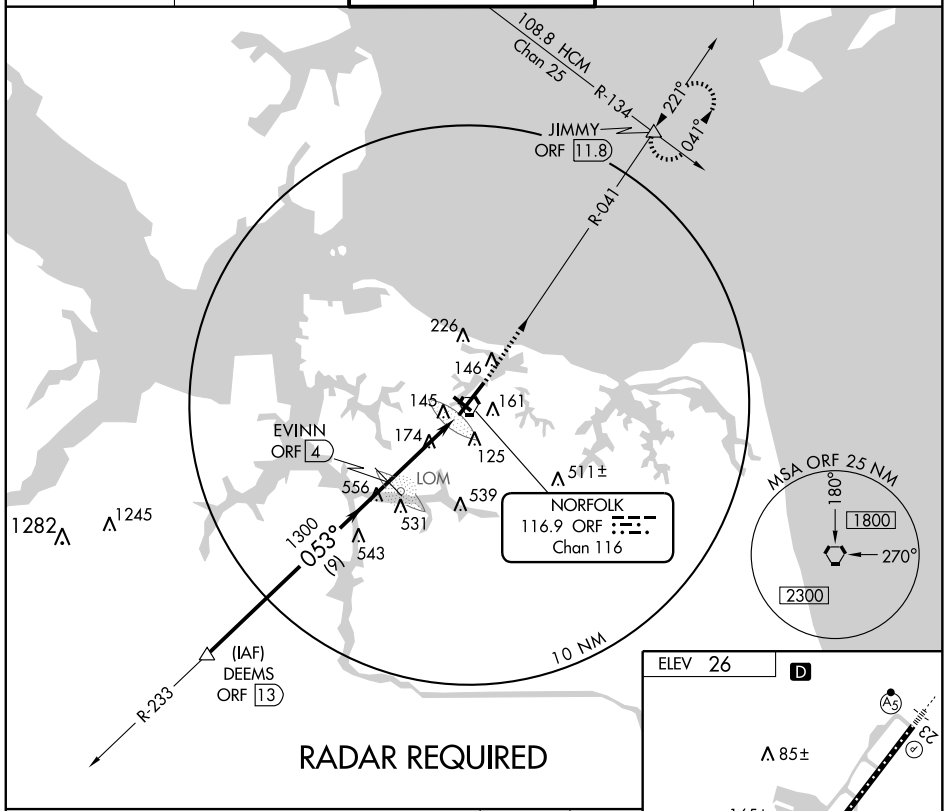
VOR/DME RWY 5
NORFOLK INTL (ORF)

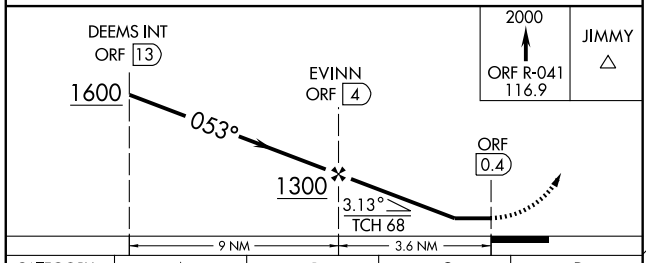
Cat D S-5 visibility increased to RVR 6000 for inoperative MALSR.

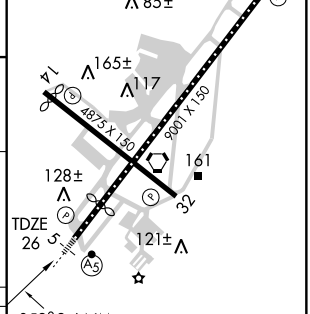
MALSR

MISSED APPROACH: Climb to 2000 via ORF R-041 to JIMMY Int/11.8 DME and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5







TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

CATEGORY	A	B	C	D
S-5	480/40 454 (500-¾)			480/50 454 (500-1)
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC ORF	APP CRS	Rwy ldg	4662
116.9	129°	TDZE	25
Chan 116		Apt Elev	26

VOR/DME RWY 14

NORFOLK INTL (ORF)

MISSED APPROACH: Climbing left turn to 2000 via ORF R-041 to JIMMY Int/11.8 DME and hold.

ATIS	NORFOLK APP CON		NORFOLK TOWER		GND CON	CLNC DEL
127.15	118.9	353.7	120.8	257.8	121.9	118.5

108.8 HCM Chan 25
JIMMY ORF 11.8
R-134
221°
041°
R-041
R-309
FLAPS ORF 10
1400
129°
(5)
CHIMP ORF 5
226
146
145
161
174
125
511±
556
539
543
1282
1245
NORFOLK 116.9 ORF Chan 116
10 NM
MSA ORF 25 NM
180°
1800
270°
2300

RADAR REQUIRED

2000
ORF R-041
116.9
JIMMY

FLAPS ORF 10
2000
129°
CHIMP ORF 5
1400
2.90°
TCH 35
ORF 0.6
5 NM
4.4 NM

ELEV 26 D

129° 4.4 NM from FAF
85±
TDZE 25
165±
117
14
4875 X 150
9001 X 150
161
128±
32
5
121±

TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

CATEGORY	A	B	C	D
S-14	440-1 415 (500-1)		440-1¼ 415 (500-1¼)	
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

VORTAC ORF 116.9 Chan 116	APP CRS 326°	Rwy ldg 4875 TDZE 25 Apt Elev 26

VOR/DME RWY 32

NORFOLK INTL (ORF)

MISSED APPROACH: Climbing right turn to 2000 via ORF R-041 to JIMMY Int/11.8 DME and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5

108.8 HCM Chan 25
R-134
JIMMY ORF 11.8
221°
041°
R-041
NORFOLK 116.9 ORF Chan 116
226
146
145
161
174
125
CAJIN ORF 4
511±
556
539
543
1300
326°
(5)
SECTS ORF 9
R-146
1282
1245
10 NM
RADAR REQUIRED
MSA ORF 25 NM
180°
1800
270°
2300

NE-3, 14 JAN 2010 to 11 FEB 2010

ELEV 26 D

85±
165±
117
14
4875 X 150
9001 X 150
23
161
TDZE 25
128±
32
5
121±
326° 3.8 NM from FAF

TDZ/CL Rwy 5
REIL Rwys 14 and 32
HIRL Rwy 5-23
MIRL Rwy 14-32

2000
ORF R-041 116.9
JIMMY
SECTS ORF 9
CAJIN ORF 4
1600
326°
ORF 0.2
1300
3.07°
TCH 35
3.8 NM
5 NM

CATEGORY	A	B	C	D
S-32	440-1 415 (500-1)		440-1¼ 415 (500-1¼)	
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

NORFOLK, VIRGINIA

AL-291 (FAA)

VOR RWY 23

NORFOLK INTL (ORF)

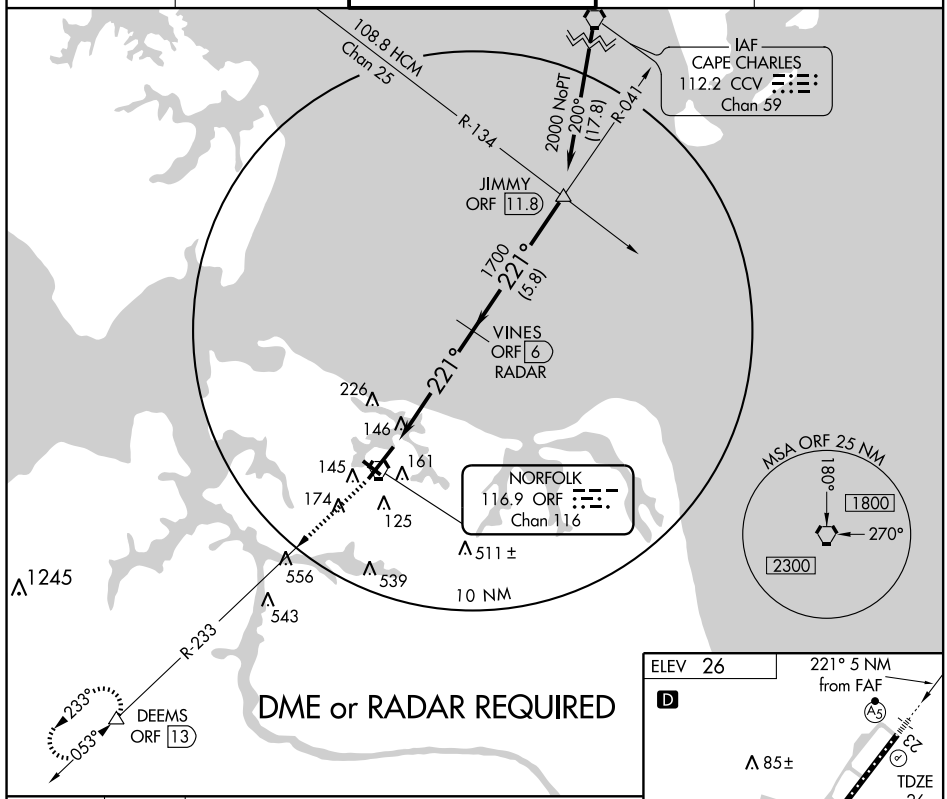
VORTAC ORF	APP CRS	Rwy ldg	9001
116.9	221°	TDZE	26
Chan 116		Apt Elev	26

All categories S-23 visibilities increased ¼ mile for inoperative MALSR.

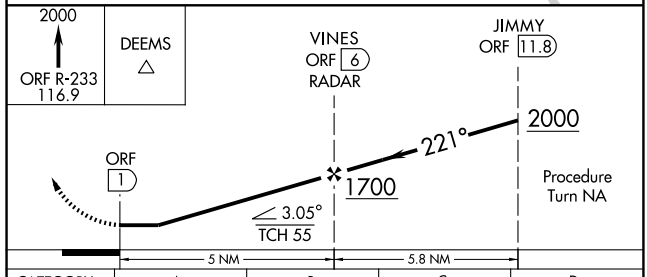
MALSR

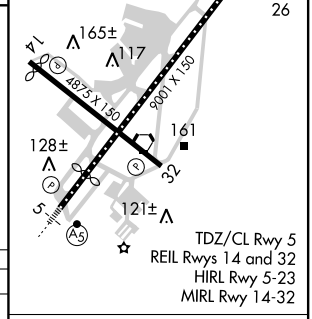
MISSED APPROACH: Climb to 2000 via ORF R-233 to DEEMS Int/ORF 13 DME and hold.

ATIS	NORFOLK APP CON	NORFOLK TOWER	GND CON	CLNC DEL
127.15	118.9 353.7	120.8 257.8	121.9	118.5



DME or RADAR REQUIRED





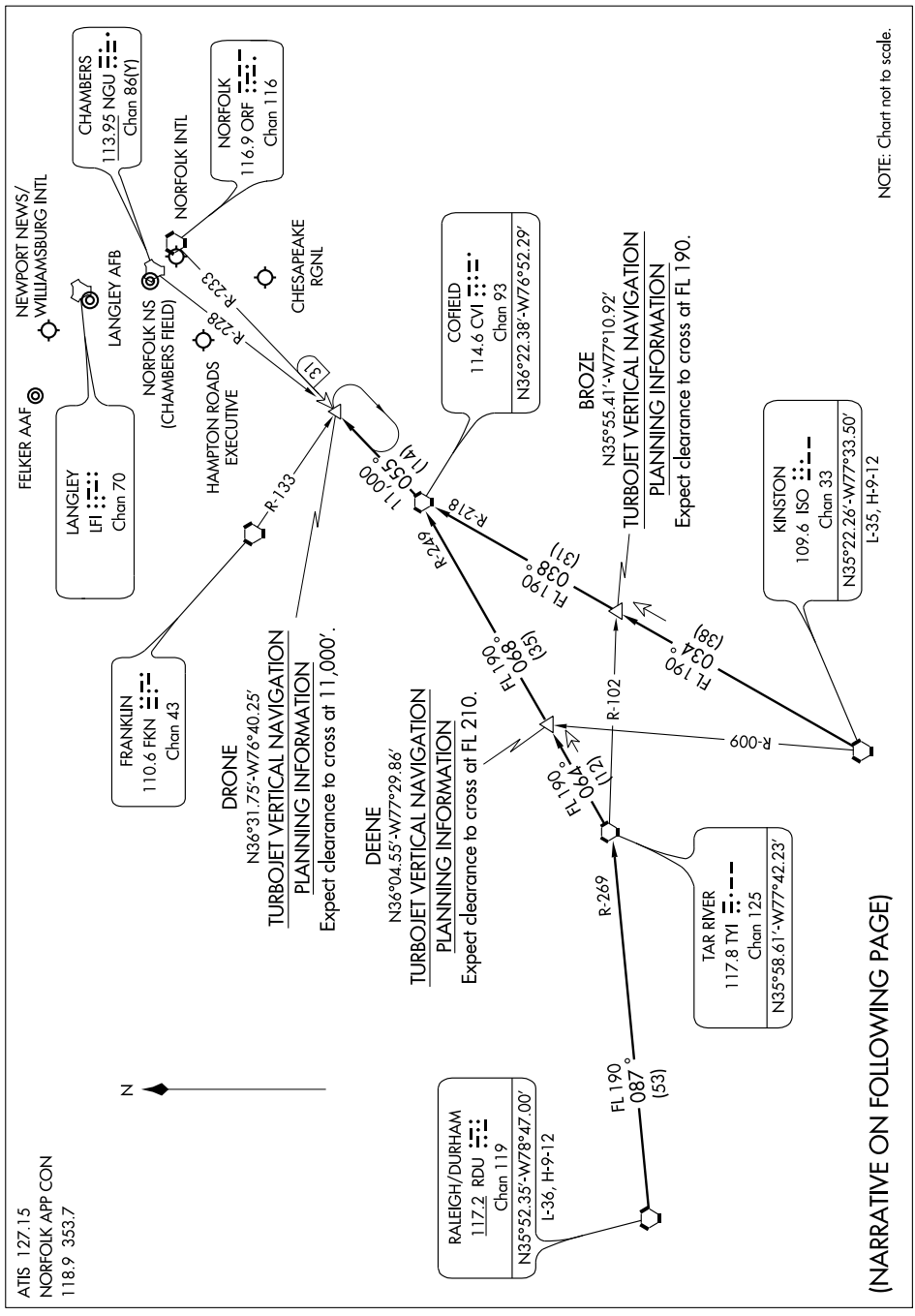
CATEGORY	A	B	C	D
S-23	420- ¾ 394 (400- ¾)			420-1 394 (400-1)
CIRCLING	520-1 494 (500-1)		540-1½ 514 (600-1½)	580-2 554 (600-2)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NE-3. 14 JAN 2010 to 11 FEB 2010

DRONE ONE ARRIVAL

NORFOLK, VIRGINIA



DRONE ONE ARRIVAL (DRONE.DRONE1)

ARRIVAL DESCRIPTION

KINSTON TRANSITION (ISO.DRONE1): From over ISO VORTAC via ISO R-034 and CVI R-218 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

RALEIGH/DURHAM (RDU.DRONE1: From over RDU VORTAC via RDU R-087 and TYI R-269 to TYI VORTAC, then via TYI R-064 and CVI R-249 to CVI VORTAC, then via CVI R-055 to DRONE INT. Thence. . . .

....From over DRONE INT expect radar vectors to final approach course.

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4056
102°	TDZE	20
	Apt Elev	23

RNAV (GPS) RWY 10

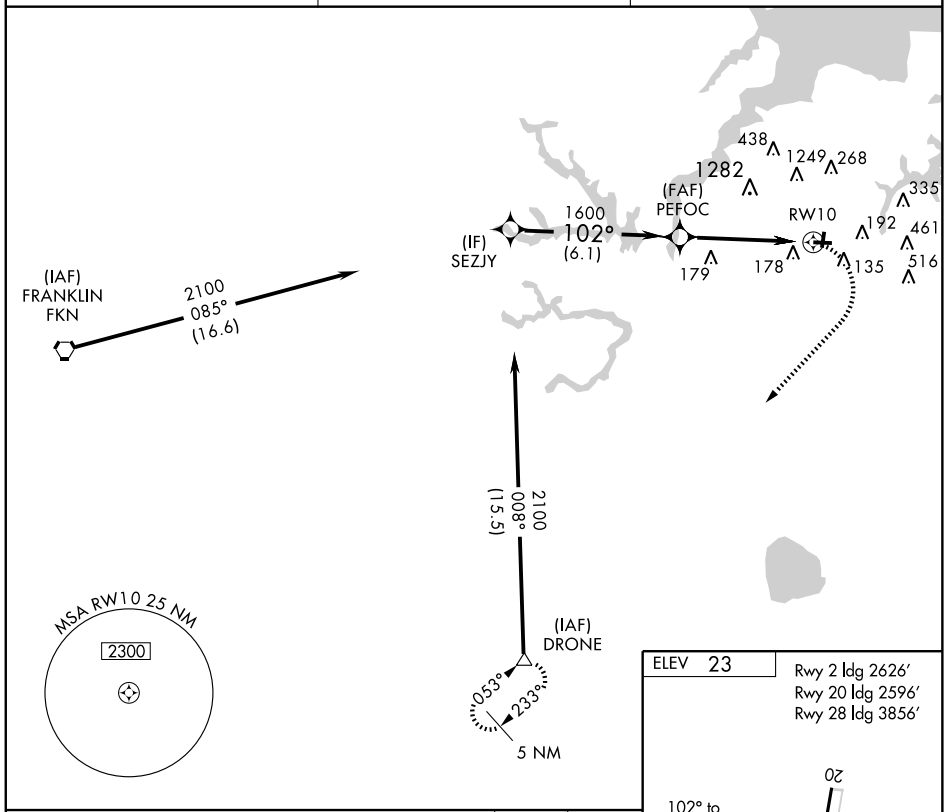
NORFOLK/HAMPTON ROADS EXECUTIVE (PVG)

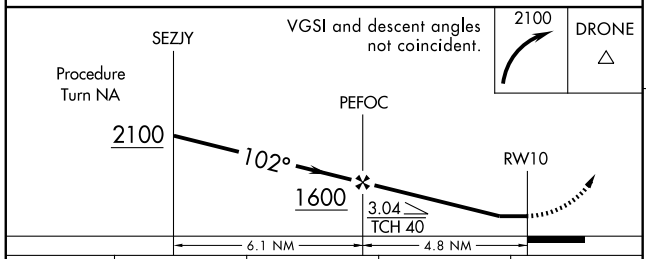
NA

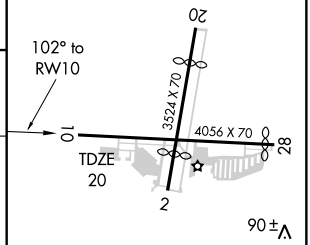
If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2100 direct DRONE and hold.

AWOS-3	NORFOLK APP CON	UNICOM
118.375	118.9 353.7	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	440-1 420 (500-1)		NA	
CIRCLING	500-1 477 (500-1)		NA	

MIRL Rwys 2-20 and 10-28 L

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3856
292°	TDZE	20
	Apt Elev	23

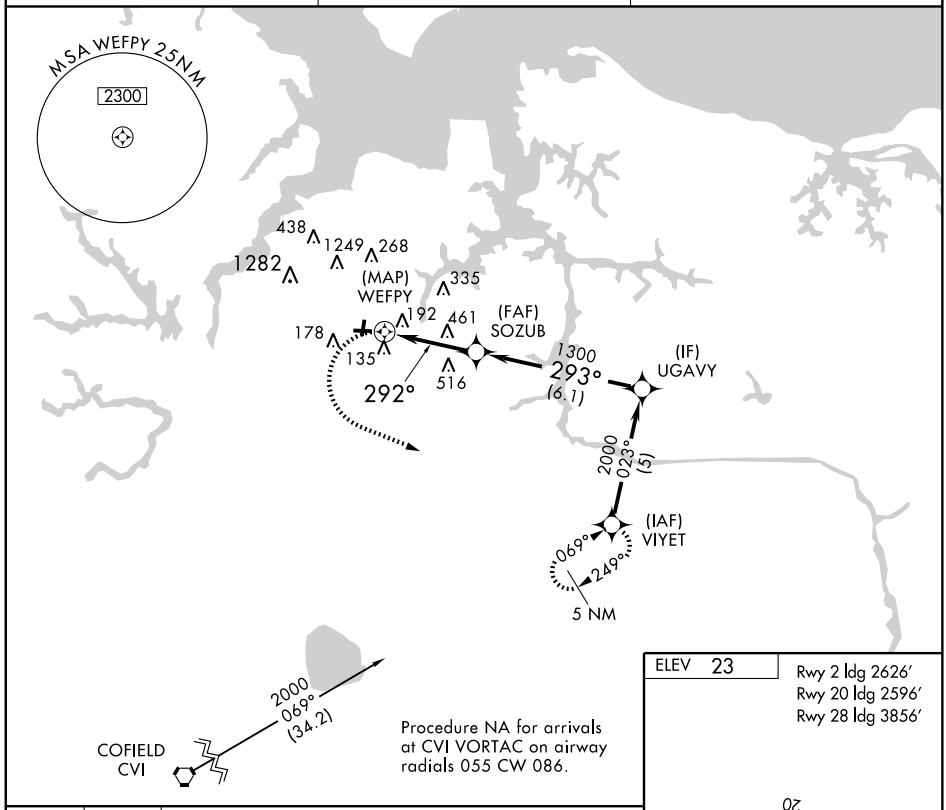
RNAV (GPS) RWY 28
NORFOLK/HAMPTON ROADS EXECUTIVE (PVG)

NA

If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2000 direct VIYET and hold.

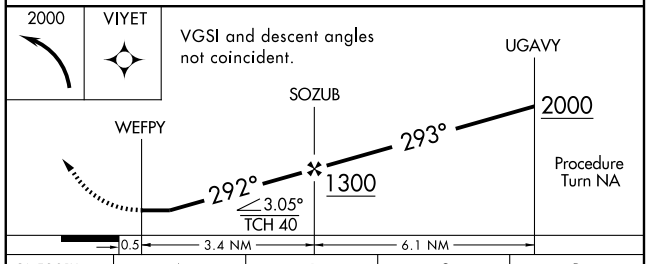
AWOS-3	NORFOLK APP CON	UNICOM
118.375	118.9 353.7	123.0 (CTAF) L

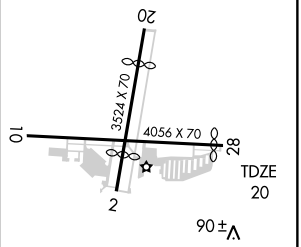


Procedure NA for arrivals at CVI VORTAC on airway radials 055 CW 086.

ELEV 23

Rwy 2 ldg 2626′
Rwy 20 ldg 2596′
Rwy 28 ldg 3856′





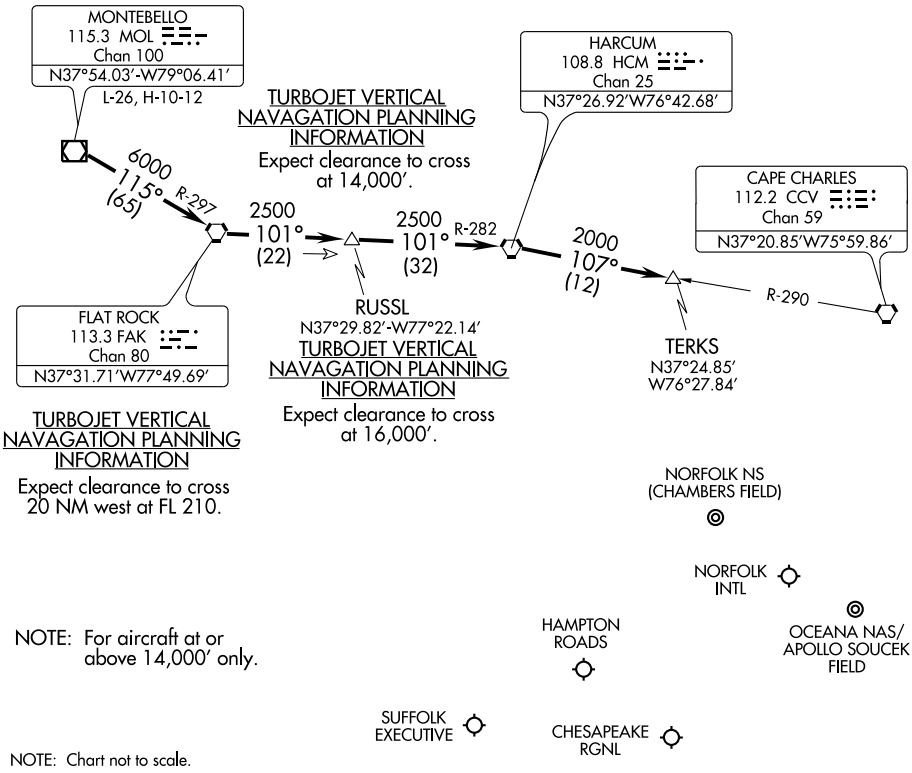
MIRL Rwys 2-20 and 10-28 L

CATEGORY	A	B	C	D
LNAV MDA	820-1 800 (800-1)	820-1¼ 800 (800-1¼)	NA	
CIRCLING	820-1 797 (800-1)	820-1¼ 797 (800-1¼)	NA	

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.

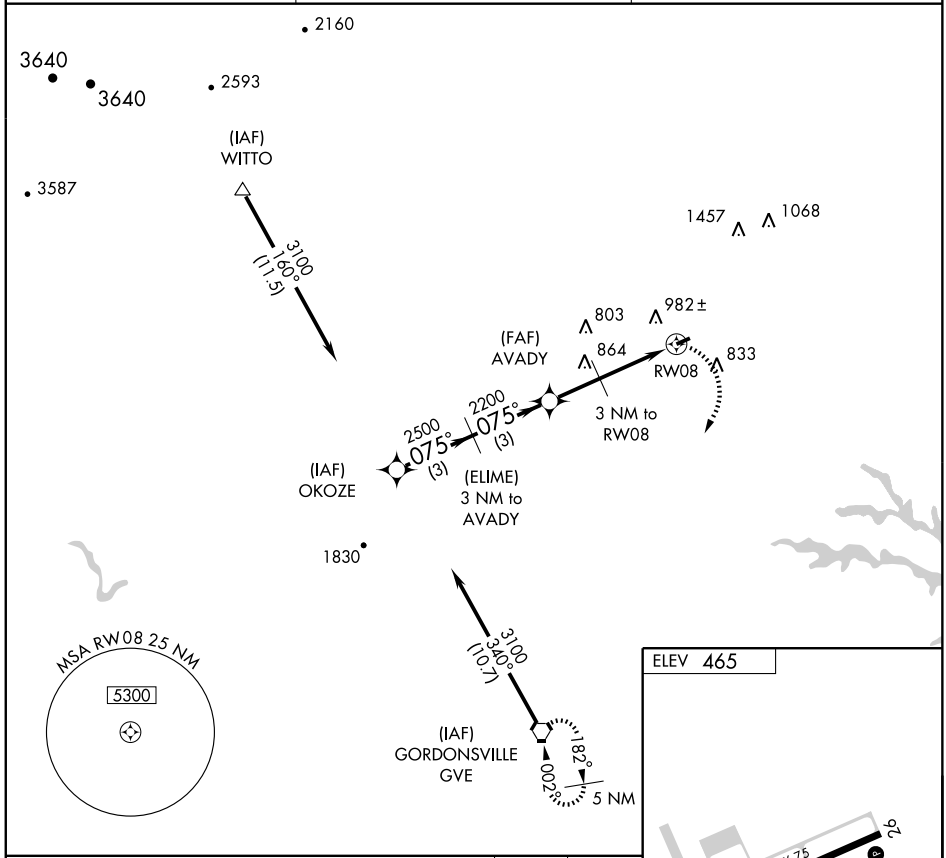
APP CRS	Rwy ldg	3200
075°	TDZE	446
	Apt Elev	465

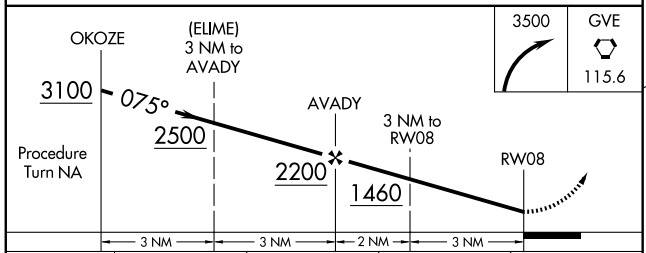
GPS RWY 8
ORANGE COUNTY (OMH)

NA

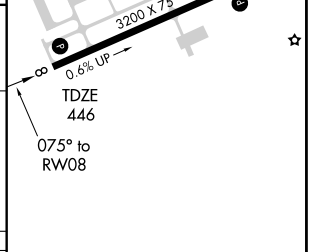
MISSED APPROACH: Climbing right turn to 3500 direct GVE VORTAC and hold.

AWOS-3	POTOMAC APP CON	UNICOM
118.075	132.85 257.75	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-8	1120-1 674 (700-1)		NA	
CIRCLING	1360-1¼ 895 (900-1¼)		NA	



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

NE-3. 14 JAN 2010 to 11 FEB 2010

ORANGE, VIRGINIA

AL-6565 (FAA)

VORTAC GVE 115.6 Chan 103	APP CRS 026°	Rwy Idg N/A TDZE N/A Apt Elev 465

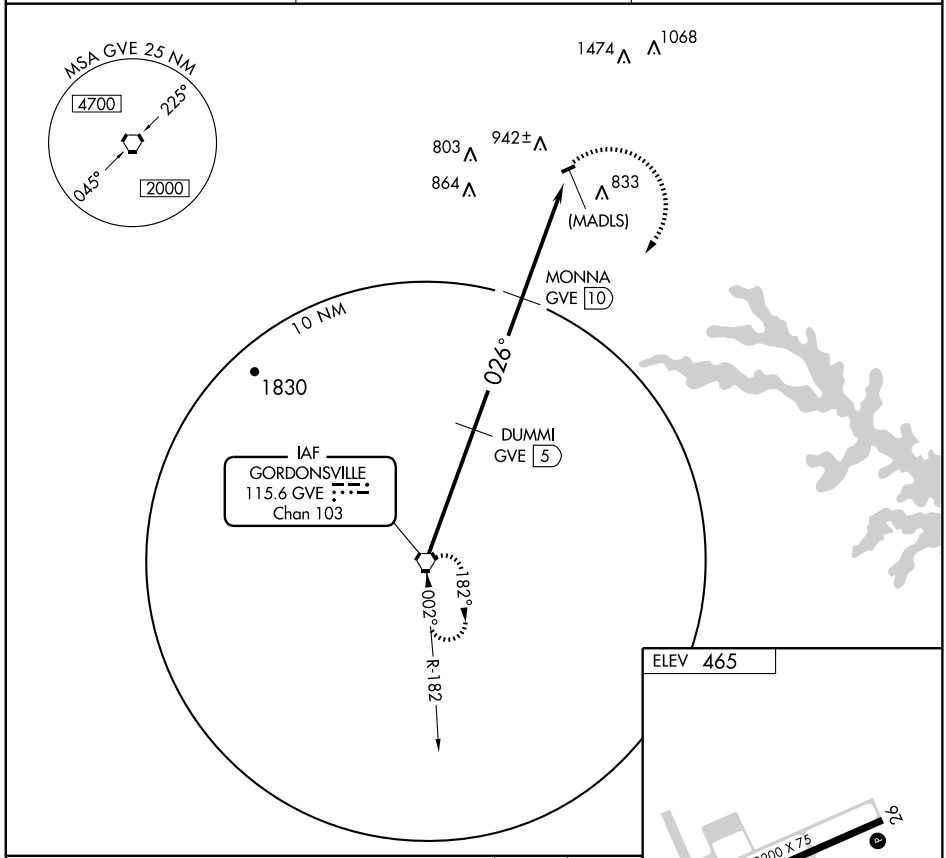
VOR/DME or GPS-A

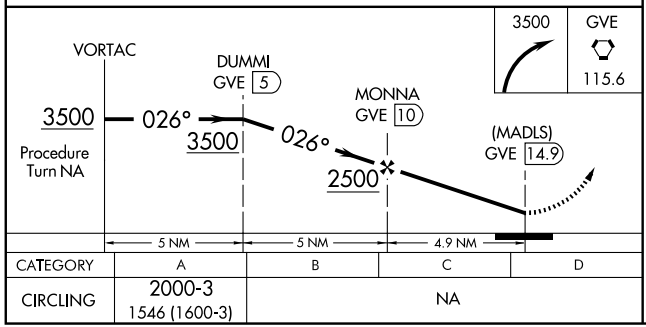
ORANGE COUNTY (OMH)

NA

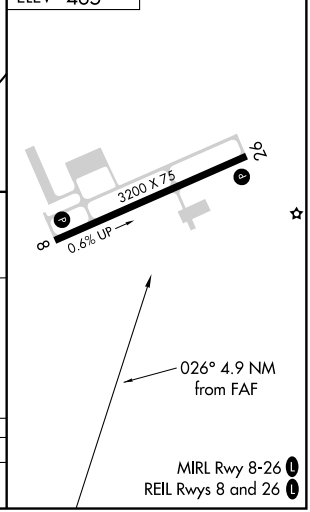
MISSED APPROACH: Climbing right turn to 3500 direct GVE VORTAC and hold.

AWOS-3	POTOMAC APP CON	UNICOM
118.075	132.85 257.75	122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	2000-3 1546 (1600-3)	NA		



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC I-JLS	APP CRS	Rwy ldg	5002
110.3	051°	TDZE	193
		Apt Elev	193

LOC RWY 5

PETERSBURG / DINWIDDIE COUNTY (PTB)

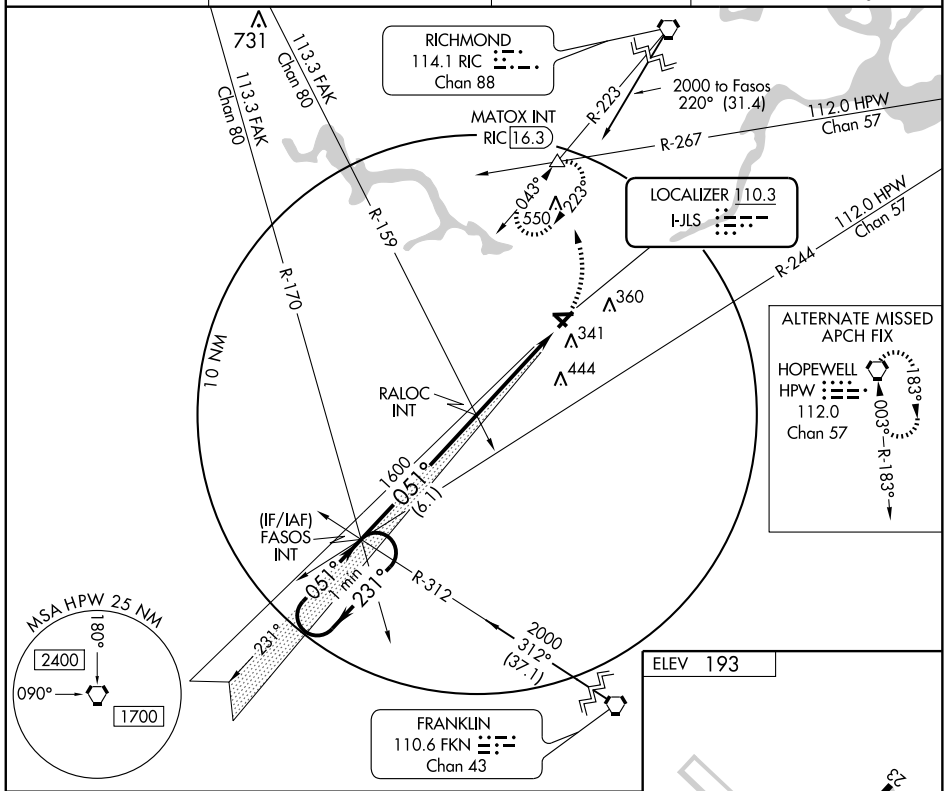
NA

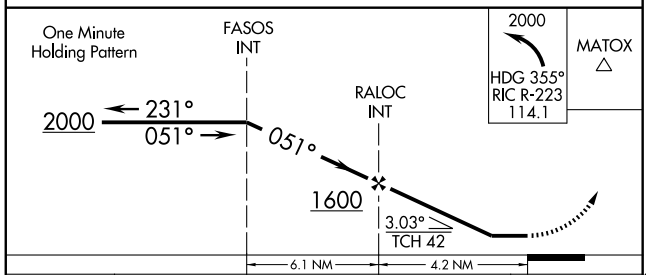
Inoperative table does not apply to S-5 Cat C. When local altimeter setting not received, use Chesterfield County altimeter setting and increase all MDAs 40 feet and Cat C visibility ¼mile.

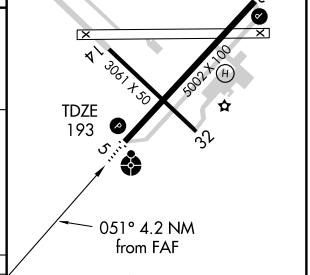
ODALS

MISSED APPROACH: Climbing left turn to 2000 via heading 355° and RIC R-223 to MATOX Int/RIC 16.3 DME and hold.

AWOS-3	POTOMAC APP CON		GCO	UNICOM
133.325	134.7	307.2	135.075	122.7 (CTAF) L







MIRL Rwy 5-23 L

REIL Rwys 5 and 23 L

CATEGORY	A	B	C	D
S-5	680-¾ 487 (500-¾)		680-1¼ 487 (500-1¼)	NA
CIRCLING	680-1 487 (500-1)		680-1½ 487 (500-1½)	NA

FAF to MAP 4.2 NM

Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 70705 W05A	APP CRS 051°	Rwy ldg 5002 TDZE 193 Apt Elev 193

RNAV (GPS) RWY 5

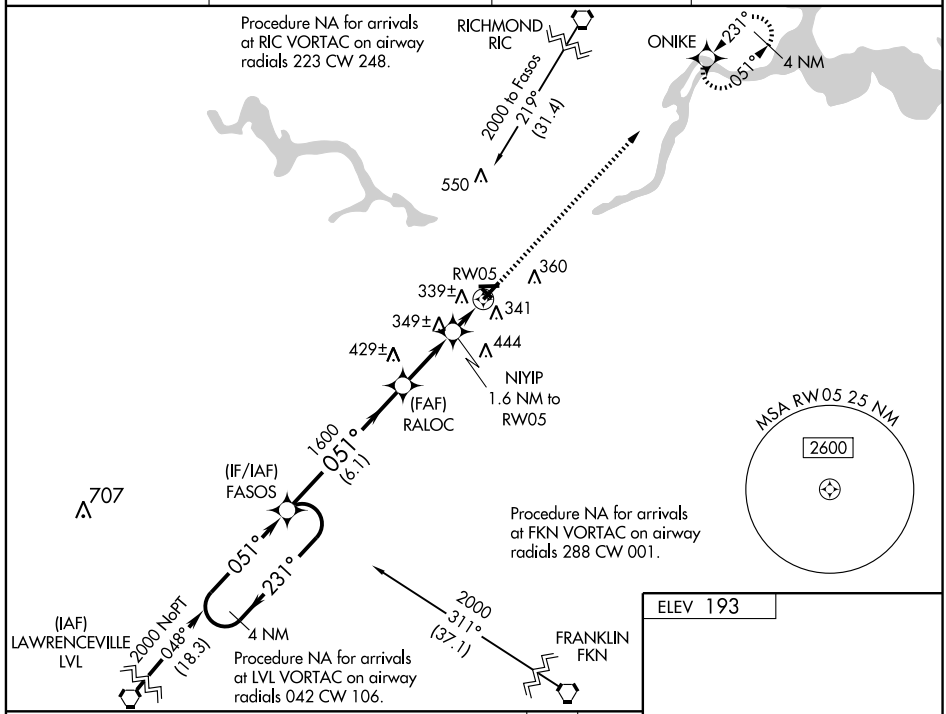
PETERSBURG / DINWIDDIE COUNTY (PTB)

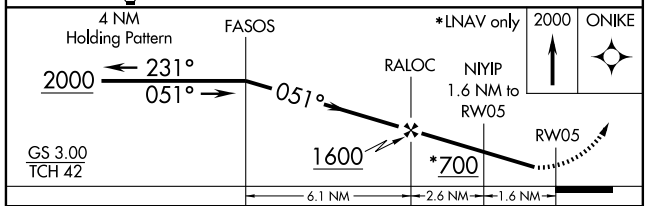
Inoperative table does not apply to LNAV/VNAV and LNAV Cat C. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Chesterfield County altimeter setting and increase all DAs/MDAs 40 feet, and LNAV/VNAV all Cats visibility ¼ mile. Baro-VNAV NA when using Chesterfield County altimeter setting. Visibility reduction by helicopters NA.

ODALS

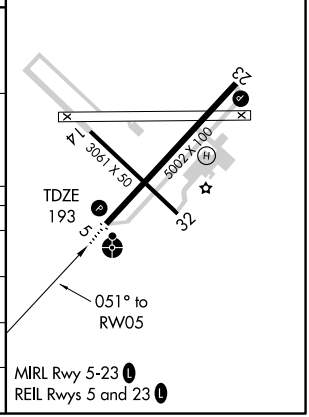
MISSED APPROACH: Climb to 2000 direct ONIKE and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
133.325	134.7 307.2	135.075	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	529-1¼ 336 (400- 1¼)			NA
LNAV/VNAV DA	620-1½ 427 (500-1½)			NA
LNAV MDA	600-¾ 407 (500-¾)		600-1¼ 407 (500-1¼)	NA
CIRCLING	660-1 467 (500- 1)		660-1½ 467 (500-1½)	NA



NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 86706 W23A	APP CRS 231°	Rwy ldg 5002 TDZE 191 Apt Elev 193

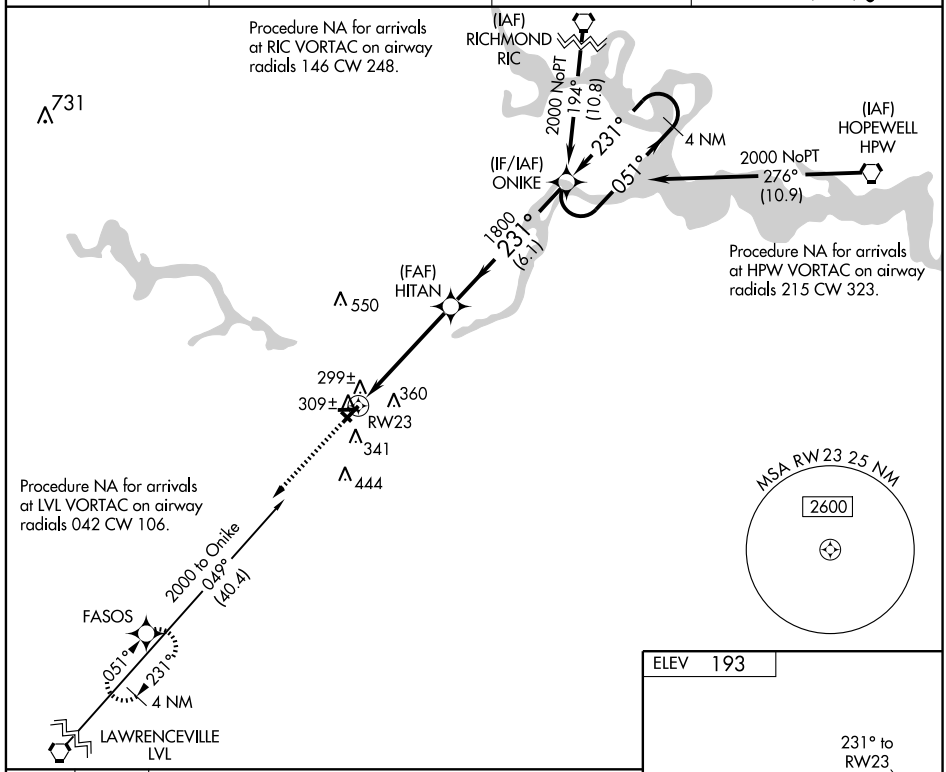
RNAV (GPS) RWY 23

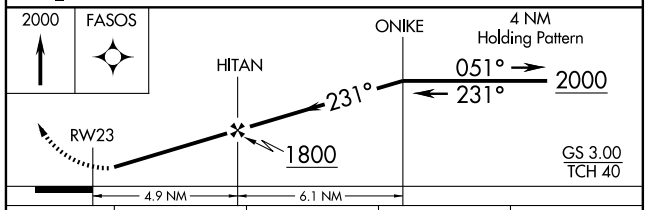
PETERSBURG / DINWIDDIE COUNTY (PTB)

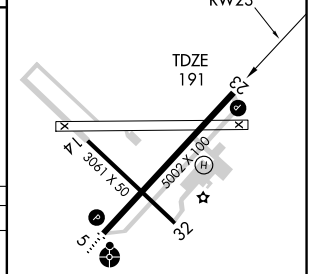
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Chesterfield County altimeter setting and increase all DAs/MDAs 40 feet. LPV and LNAV/VNAV all Cats visibility ¼ mile and LNAV Cat C ¼ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 direct FASOS and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
133.325	134.7 307.2	135.075	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	499-1	308 (400- 1)		NA
LNAV/VNAV DA	644-1½	453 (500-1½)		NA
LNAV MDA	560-1	369 (400- 1)		NA
CIRCLING	660-1	467 (500- 1)	660-1½ 467 (500-1½)	NA

MIRL Rwy 5-23 L
REIL Rwys 5 and 23 L

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC HPW	APP CRS	Rwy ldg	5002
112.0	252°	TDZE	192
Chan 57		Apt Elev	193

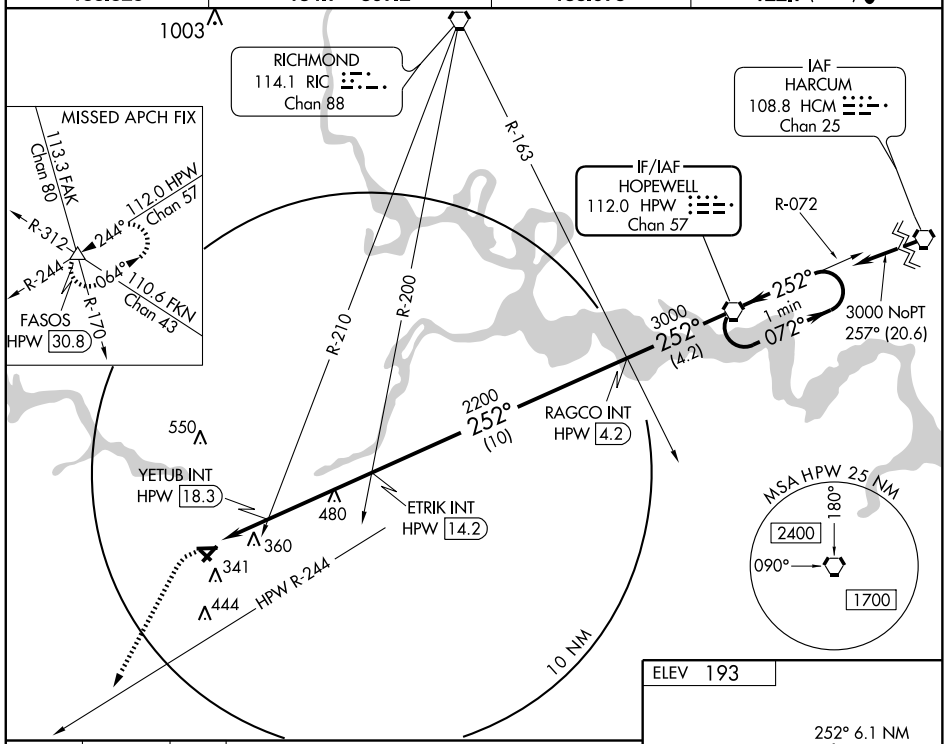
VOR RWY 23

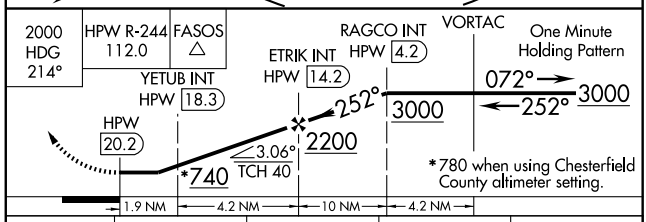
PETERSBURG / DINWIDDIE COUNTY (PTB)

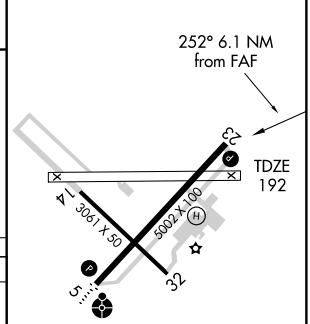
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Chesterfield County altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2000 via heading 214° and HPW R-244 to FASOS INT/HPW 30.8 DME and hold.

AWOS-3	POTOMAC APP CON		GCO	UNICOM
133.325	134.7	307.2	135.075	122.7 (CTAF) L





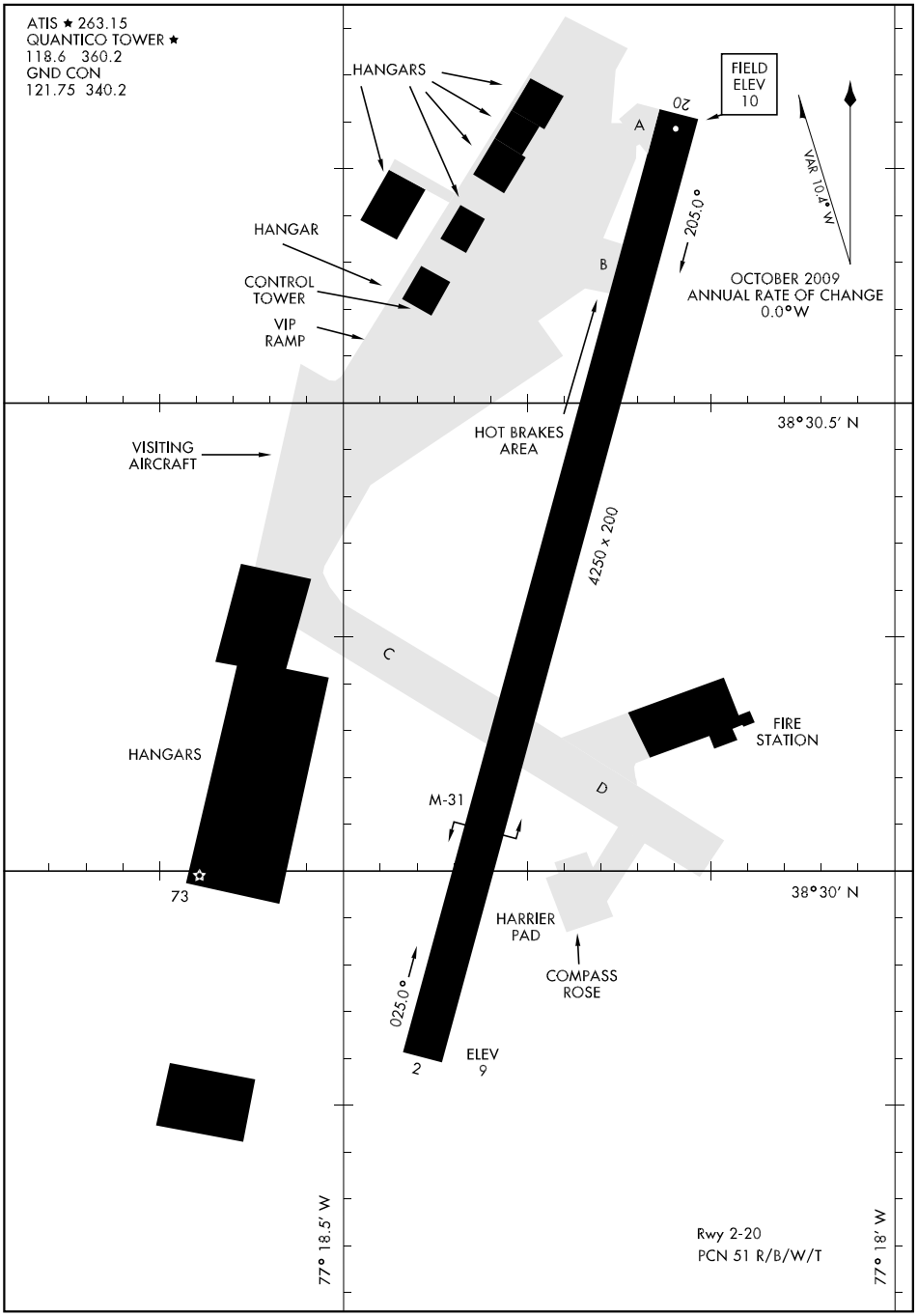


MIRL Rwy 5-23 L
REIL Rwys 5 and 23 L

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

CATEGORY	A	B	C	D
S-23	740-1 548 (600-1)	740-1¼ 548 (600-1¼)	740-1½ 548 (600-1½)	NA
CIRCLING	740-1 547 (600-1)	740-1¼ 547 (600-1¼)	740-1½ 547 (600-1½)	NA
YETUB FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-23	620-1 428 (500-1)	620-1¼ 428 (500-1¼)	620-1½ 428 (500-1½)	NA
CIRCLING	660-1 467 (500-1)	660-1¼ 467 (500-1¼)	660-1½ 467 (500-1½)	NA

NE-3. 14 JAN 2010 to 11 FEB 2010


ATIS ★ 263.15
QUANTICO TOWER ★
118.6 360.2
GND CON
121.75 340.2
HANGARS
FIELD ELEV 10
20
A
VAR 10.4° W
205.0°
HANGAR
B
CONTROL TOWER
VIP RAMP
OCTOBER 2009
ANNUAL RATE OF CHANGE
0.0°W
38°30.5′ N
VISITING AIRCRAFT
HOT BRAKES AREA
4250 x 200
C
FIRE STATION
HANGARS
D
M-31
73
38°30′ N
HARRIER PAD
COMPASS ROSE
025.0°
2
ELEV 9
77° 18.5′ W
Rwy 2-20
PCN 51 R/B/W/T
77° 18′ W

RNAV (GPS) RWY 2

APCH CRS	Rwy ldg	4250
024°	TDZE	10
	Arpt Elev	10

AL-339 [USN] QUANTICO MCAF (TURNER FIELD) (KNYG)

* Circling not authorized W of Rwy 2-20. Procedure NA at night when VGSI inop. Procedure TCH not coincident with PAPI's.

MISSED APPROACH: Climbing right turn direct BRV VORTAC and hold.

ATIS ★	POTOMAC APP CON	QUANTICO TOWER ★	GND CON	ASR/PAR
263.15	124.65 306.92	118.6 360.2	121.75 340.2	

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (110°F).

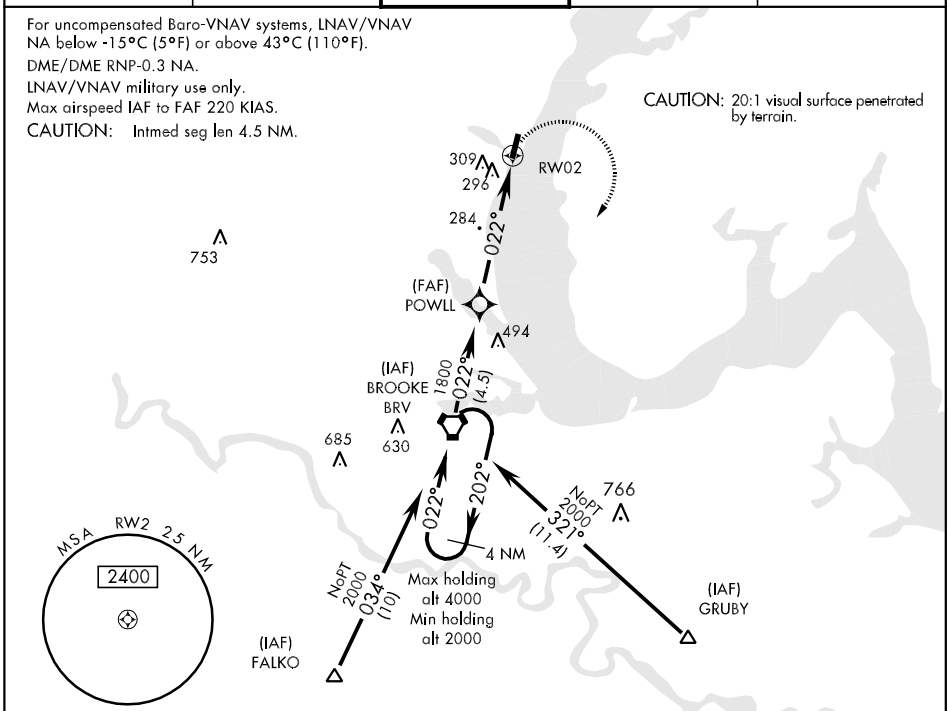
DME/DME RNP-0.3 NA.

LNAV/VNAV military use only.

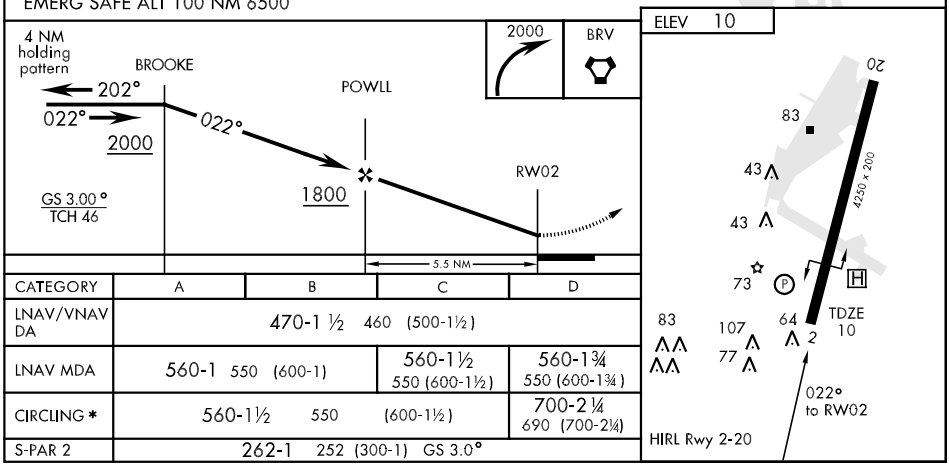
Max airspeed IAF to FAF 220 KIAS.

CAUTION: Intmed seg len 4.5 NM.

CAUTION: 20:1 visual surface penetrated by terrain.



EMERG SAFE ALT 100 NM 6500



CATEGORY	A	B	C	D
LNAV/VNAV DA	470-1 ½ 460 (500-1½)			
LNAV MDA	560-1 550 (600-1)		560-1½ 550 (600-1½)	560-1¾ 550 (600-1¾)
CIRCLING *	560-1½ 550 (600-1½)			700-2¼ 690 (700-2¼)
S-PAR 2	262-1 252 (300-1) GS 3.0°			

TACAN RWY 2

BRV VORTAC	APCH CRS	Rwy ldg	4250
114.5	022°	TDZE	10
Chan 92		Arpt Elev	10

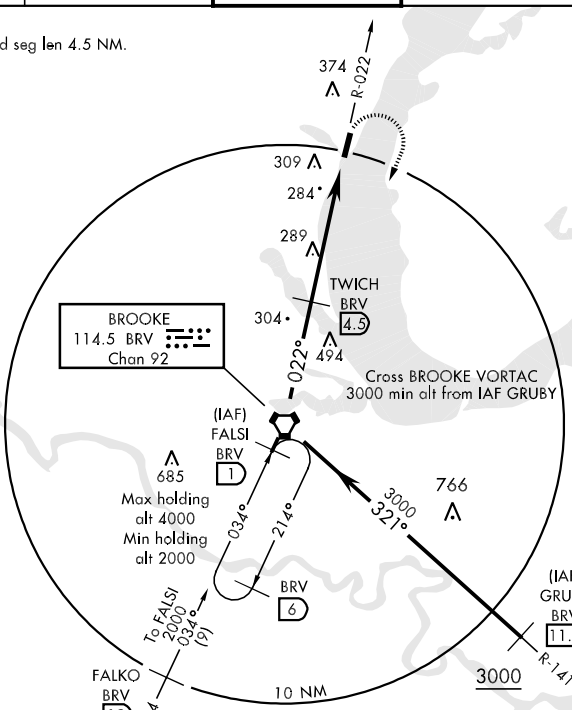
AL-339 [USN] QUANTICO MCAF (TURNER FIELD) (KNYG)

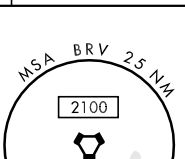
* Circling not authorized W of Rwy 2-20. Procedure NA at night when VGSI inop.

MISSED APPROACH: Climbing right turn to 2000 direct BRV VORTAC, then via R-214 to FALSI and hold.

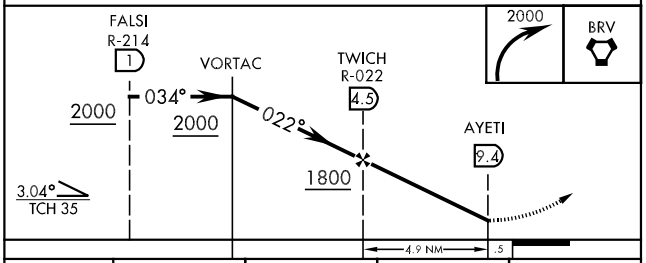
ATIS ★	POTOMAC APP CON	QUANTICO TOWER ★	GND CON	ASR/PAR
263.15	124.65 306.92	118.6 360.2	121.75 340.2	

CAUTION: Intmed seg len 4.5 NM.

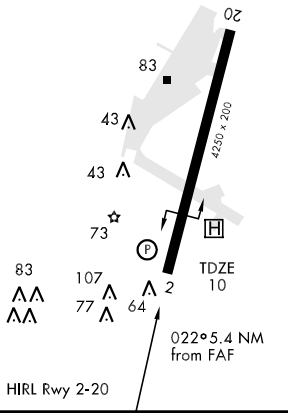




EMERG SAFE ALT 100 NM 6500



ELEV 10



CATEGORY	A	B	C	D
S-2	560-1 550 (600-1)		560-1½ 550 (600-1½)	560-1¾ 550 (600-1¾)
CIRCLING *	560-1 550 (600-1)		560-1½ 550 (600-1½)	700-2¼ 690 (700-2¼)
S-PAR 2	262-1 252 (300-1)			GS 3.0°

QUINTON, VIRGINIA

APP CRS	Rwy ldg	3600
120°	TDZE	123
	Apt Elev	123

AL-6855 (FAA)

RNAV (GPS) RWY 10

QUINTON / NEW KENT COUNTY (W96)

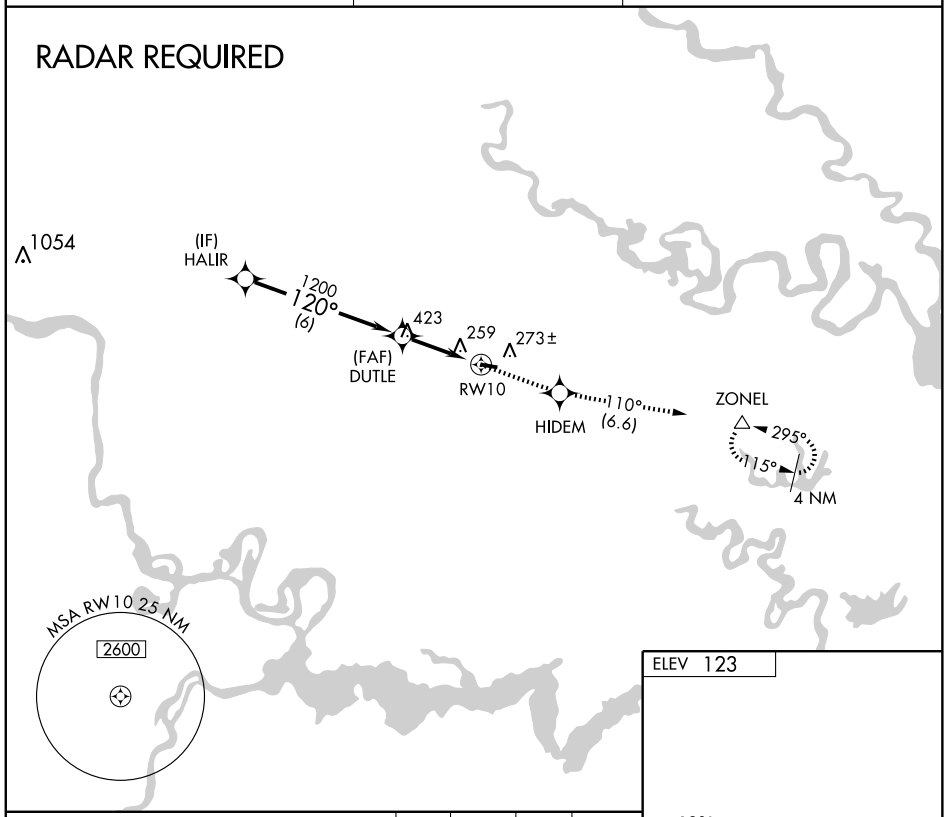
NA

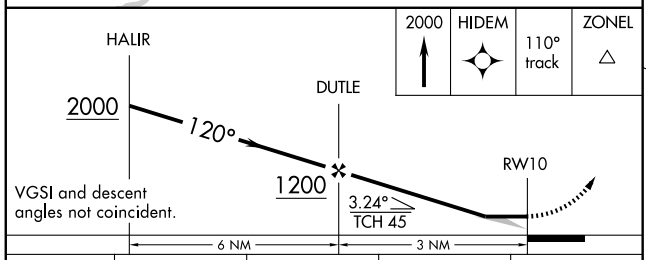
Use Richmond Intl altimeter setting.
DME/DME RNP-0.3 NA.

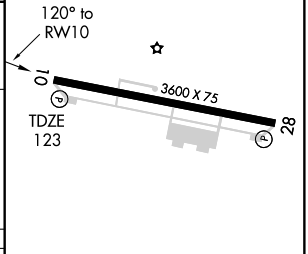
MISSED APPROACH: Climb to 2000 direct HIDEM and via 110° track to ZONEL and hold.

POTOMAC APP CON	GCO	UNICOM
126.4 282.375	135.075	122.8 (CTAF) L

RADAR REQUIRED







CATEGORY	A	B	C	D
LNAV MDA	560-1 437 (500-1)		560-1¼ 437 (500-1¼)	NA
CIRCLING	600-1 477 (500-1)		600-1½ 477 (500-1½)	NA

MIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

NE-3. 14 JAN 2010 to 11 FEB 2010

QUINTON, VIRGINIA

APP CRS	Rwy ldg	3600
290°	TDZE	123
	Apt Elev	123

AL-6855 (FAA)

RNAV (GPS) RWY 28

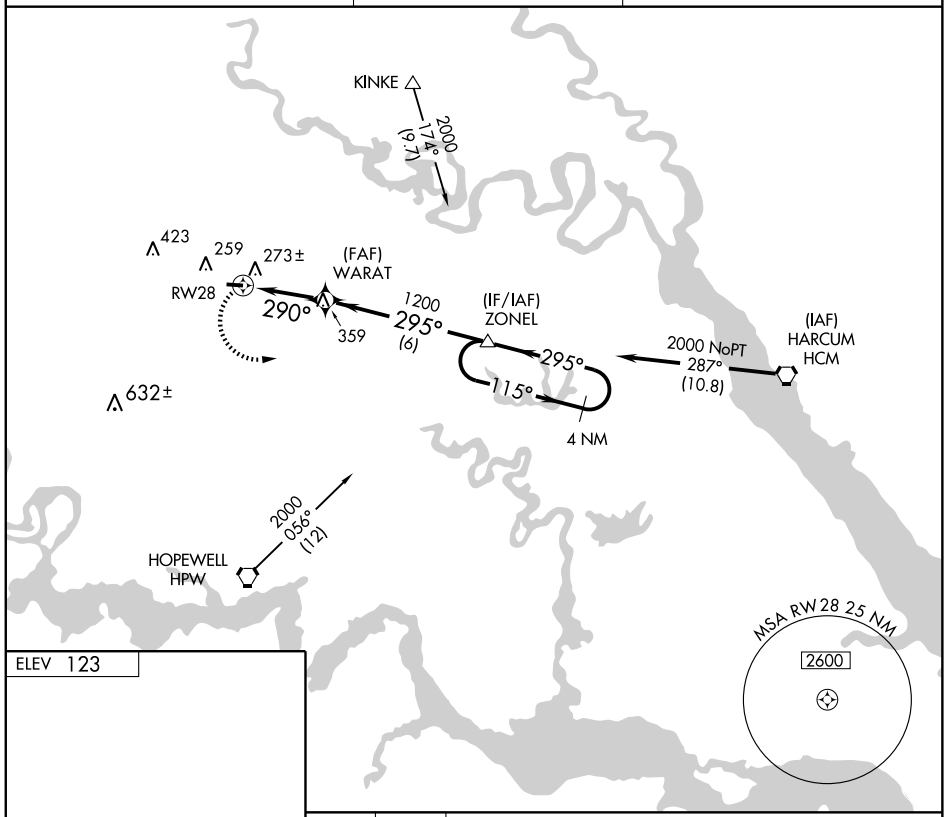
QUINTON / NEW KENT COUNTY (W96)

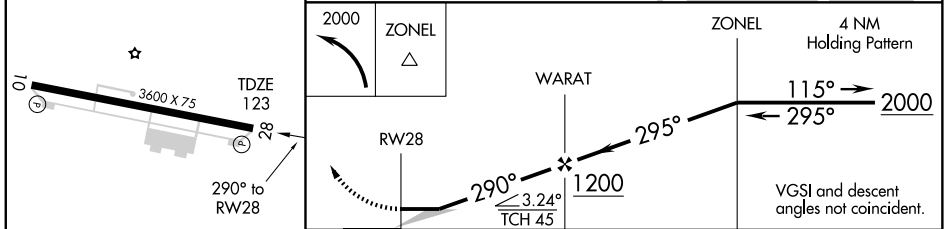
Use Richmond Intl altimeter setting.
DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climbing left turn to 2000 direct ZONEL and hold.

POTOMAC APP CON	GCO	UNICOM
126.4 282.375	135.075	122.8 (CTAF)





CATEGORY	A	B	C	D
LNAV MDA	540-1 417 (500-1)		540-1¼ 417 (500-1¼)	NA
CIRCLING	600-1 477 (500-1)		600-1½ 477 (500-1½)	NA

MIRL Rwy 10-28
REIL Rwys 10 and 28

NE-3. 14 JAN 2010 to 11 FEB 2010

QUINTON, VIRGINIA

VORTAC HPW	APP CRS	Rwy ldg	N/A
112.0	003°	TDZE	N/A
Chan 57		Apt Elev	123

AL-6855 (FAA)

VOR-A

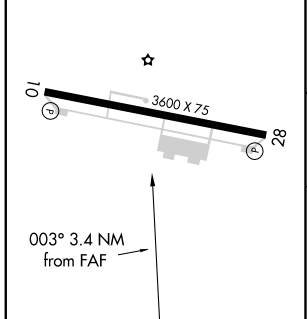
QUINTON / NEW KENT COUNTY (W96)

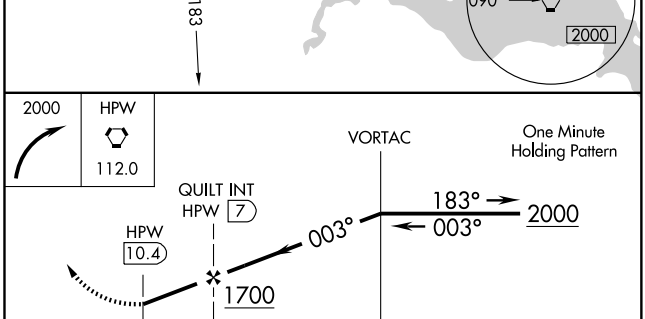
NA

Use Richmond altimeter setting.

MISSED APPROACH: Climbing right turn to 2000 direct HPW VORTAC and hold.

POTOMAC APP CON	GCO	UNICOM
126.4 282.375	135.075	122.8 (CTAF) L





FAF to MAP 3.4 NM					
Knots	60	90	120	150	180
Min:Sec	3:24	2:16	1:42	1:22	1:08

CATEGORY	A	B	C	D
CIRCLING	660-1 537 (600-1)		660-1½ 537 (600-1½)	NA

NE-3, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-JFZ	APP CRS	Rwy ldg	4300
109.75	252°	TDZE	2653
Chan 34 (Y)		Apt Elev	2653

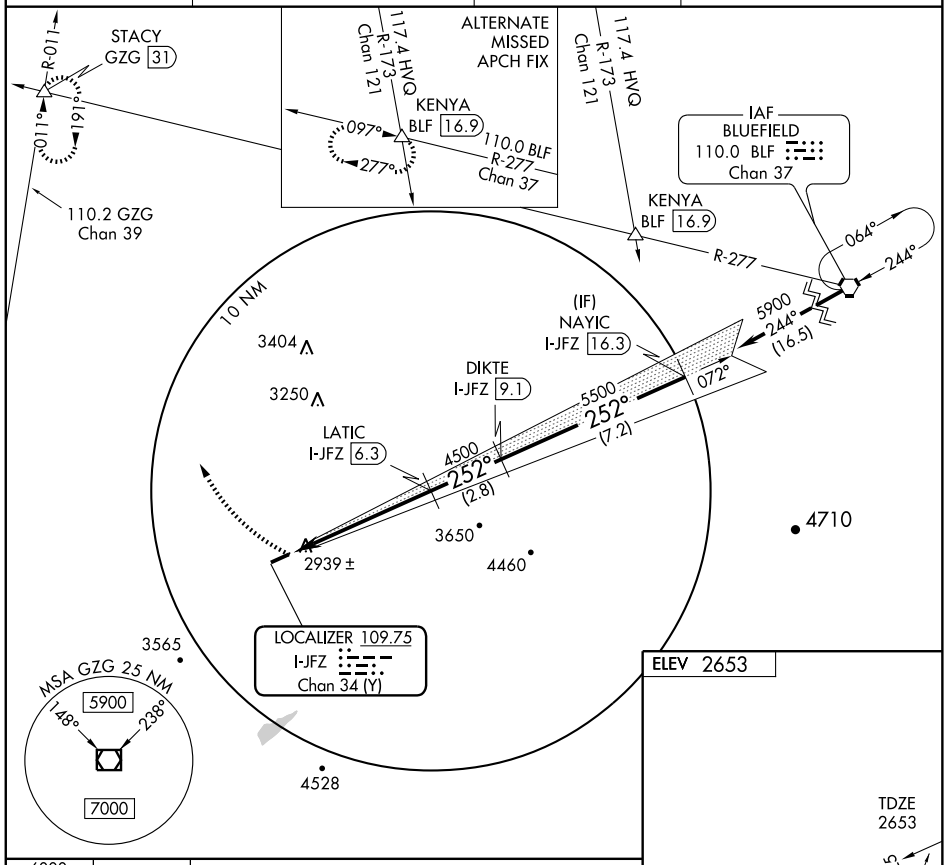
LOC/DME RWY 25

RICHLANDS / TAZEWELL COUNTY (JFZ)

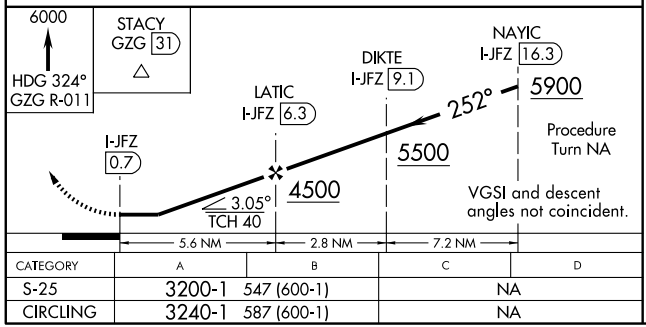
Procedure NA at night.
If local altimeter setting not received, use Lonesome Pine altimeter setting and increase all MDAs 100 ft.

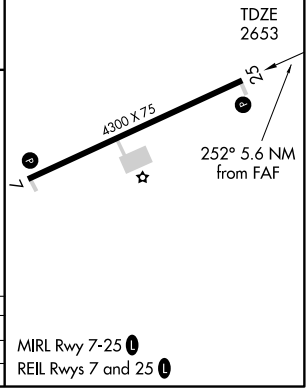
MISSED APPROACH: Climb to 6000 via heading 324° and GZG VOR/DME R-011 to STACY INT/GZG VOR/DME 31 DME and hold.

AWOS-3	INDIANAPOLIS CENTER	GCO	UNICOM
118.075	126.575 257.85	135.075	123.05 (CTAF) L



ELEV 2653





CATEGORY	A	B	C	D
S-25	3200-1	547 (600-1)	NA	
CIRCLING	3240-1	587 (600-1)	NA	

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

APP CRS	Rwy ldg	4300
238°	TDZE	2653
	Apt Elev	2653

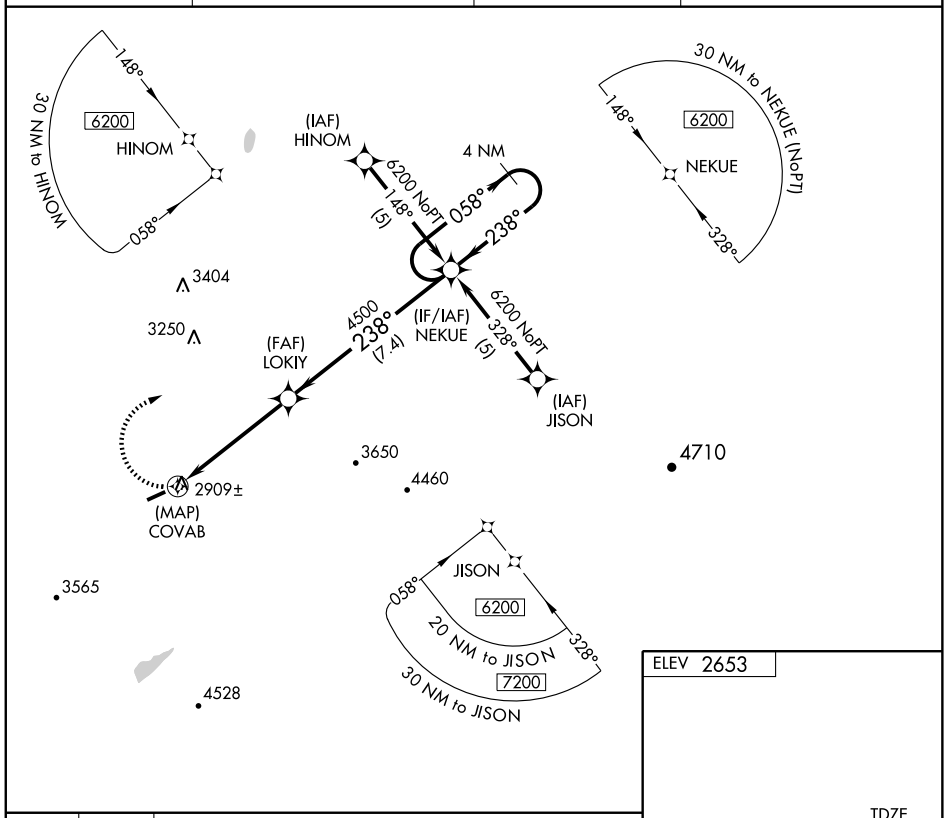
RNAV (GPS) RWY 25

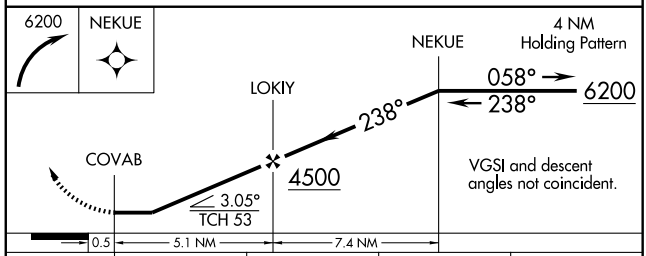
RICHLANDS / TAZEWELL COUNTY (JFZ)

DME/DME RNP-0.3 NA. Procedure NA at night. If local altimeter setting not received, use Lonesome Pine altimeter setting and increase all MDAs 100 ft.

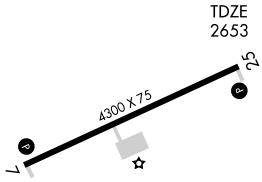
MISSED APPROACH: Climbing right turn to 6200 direct NEKUE and hold, continue climb-in-hold to 6200.

AWOS-3	INDIANAPOLIS CENTER	GCO	UNICOM
118.075	126.575 257.85	135.075	123.05 (CTAF) L





ELEV 2653



CATEGORY	A	B	C	D
LNAV MDA	3160-1 507 (600-1)		3160-1½ 507 (600-1½)	
CIRCLING	3220-1 567 (600-1)		3220-1½ 567 (600-1½)	3220-2 567 (600-2)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-CFU	APP CRS	Rwy ldg	5500
108.3	331°	TDZE	218
Chan 20		Apt Elev	237

ILS or LOC RWY 33

RICHMOND/CHESTERFIELD COUNTY (FCI)

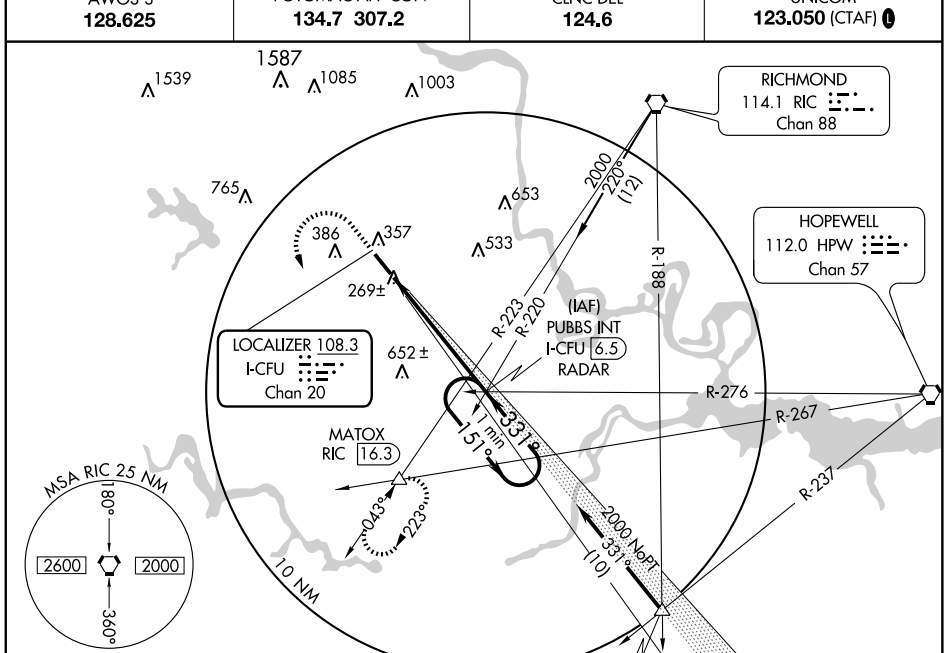
For inoperative MALSR, increase S-LOC 33 visibility Cat D to 1. If local altimeter setting not received, use Richmond Intl altimeter setting and increase all DAs/MDAs 40 feet. VDP NA when using Richmond Intl altimeter setting.

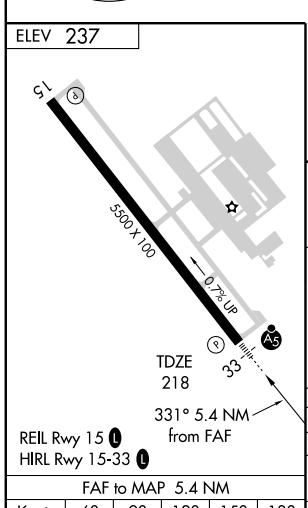
NA

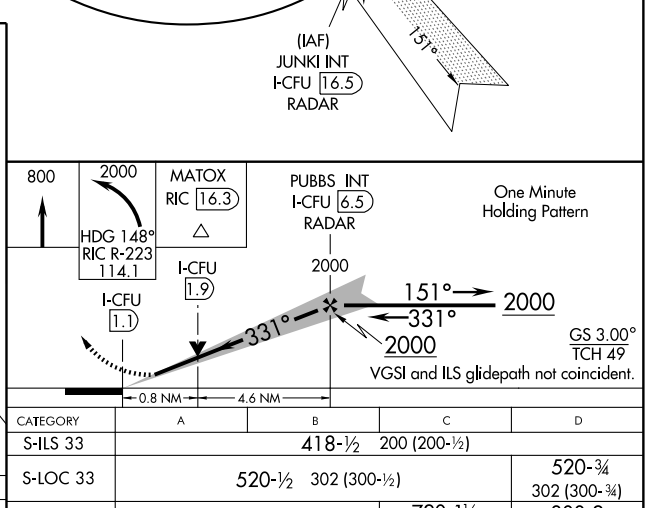
MALSR

MISSED APPROACH: Climb to 800, then climbing left turn to 2000 via heading 148° and RIC R-223 to MATOX INT/RIC 16.3 DME and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.625	134.7 307.2	124.6	123.050 (CTAF) L







FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-ILS 33	418-½ 200 (200-½)			
S-LOC 33	520-½ 302 (300-½)			520-¾ 302 (300-¾)
CIRCLING	720-1 483 (500-1)		720-1½ 483 (500-1½)	800-2 563 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5500
151°	TDZE	237
	Apt Elev	237

RNAV (GPS) RWY 15

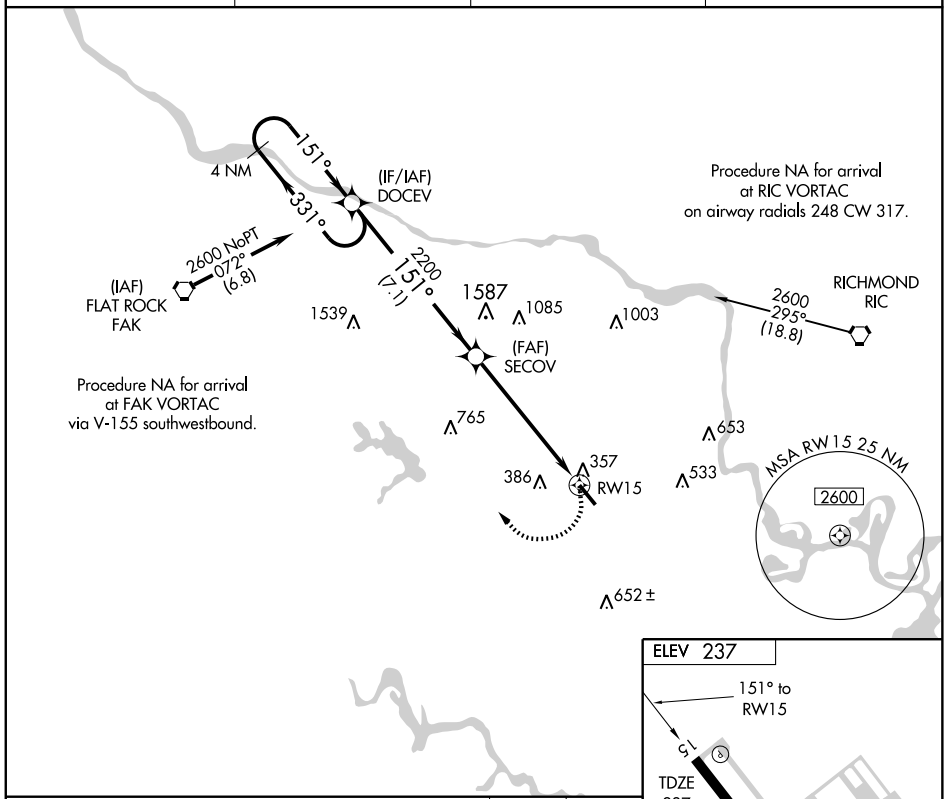
RICHMOND/CHESTERFIELD COUNTY (FCI)

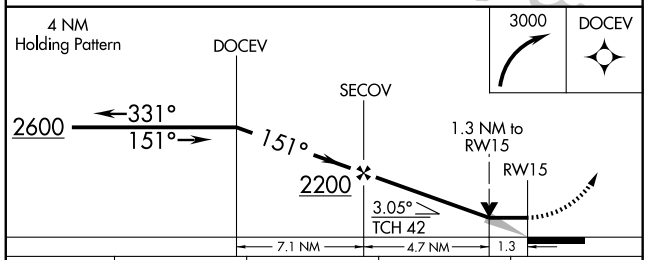
NA

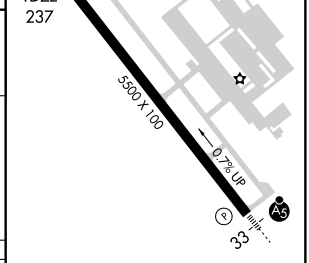
If local altimeter setting not received, use Richmond Intl altimeter setting and increase all MDAs 40 feet. DME/DME RNP-0.3 NA. VDP NA when using Richmond Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct DOCEV and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.625	134.7 307.2	124.6	123.050 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	680-1 443 (500-1)		680-1¼ 443 (500-1¼)	680-1½ 443 (500-1½)
CIRCLING	720-1 483 (500-1)		720-1½ 483 (500-1½)	800-2 563 (600-2)

REIL Rwy 15 L
HIRL Rwy 15-33 L

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 56221 W33A	APP CRS 331°	Rwy ldg 5500 TDZE 218 Apt Elev 237

RNAV (GPS) RWY 33

RICHMOND/CHESTERFIELD COUNTY (FCI)

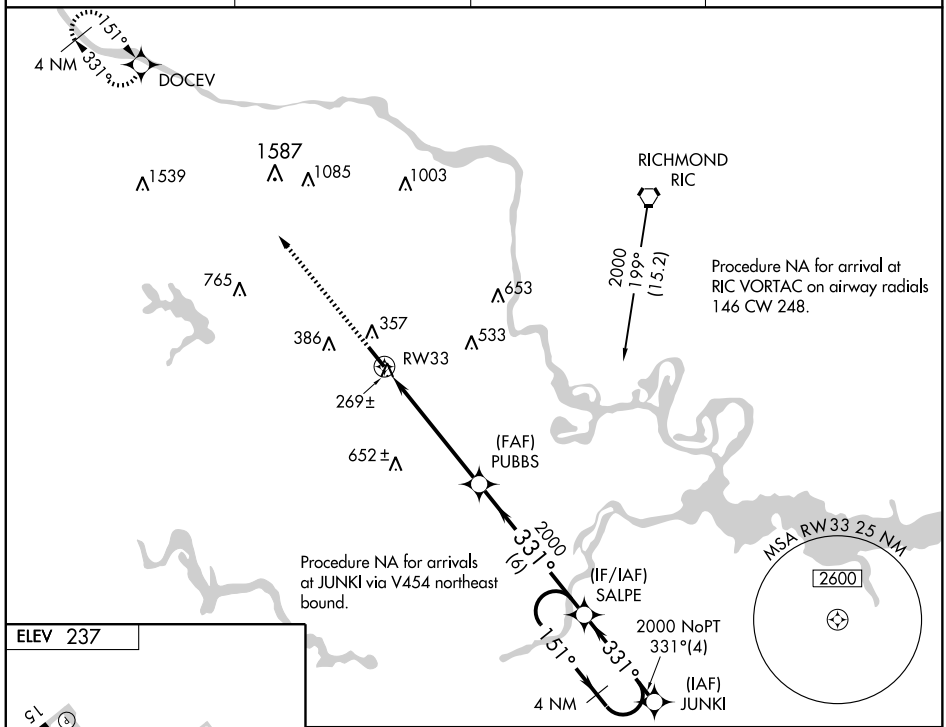
For inoperative MALSR increase LPV all Cats visibility to 1. If local altimeter setting not received, use Richmond Intl altimeter setting and increase all DAs/MDAs 40 feet. VDP and Baro-VNAV NA when using Richmond Intl altimeter setting. For uncompensated Baro-VNAV systems LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

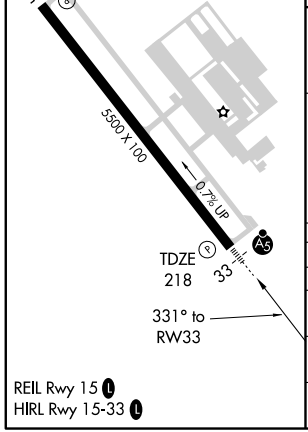
NA

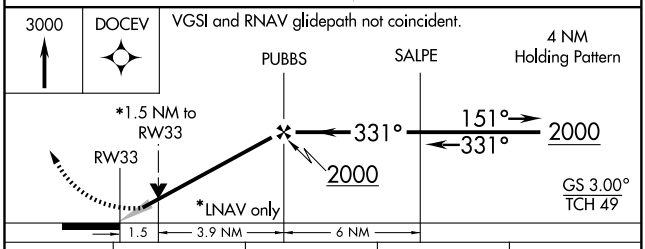
MALSR

MISSED APPROACH: Climb to 3000 direct DOCEV and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.625	134.7 307.2	124.6	123.050 (CTAF) L







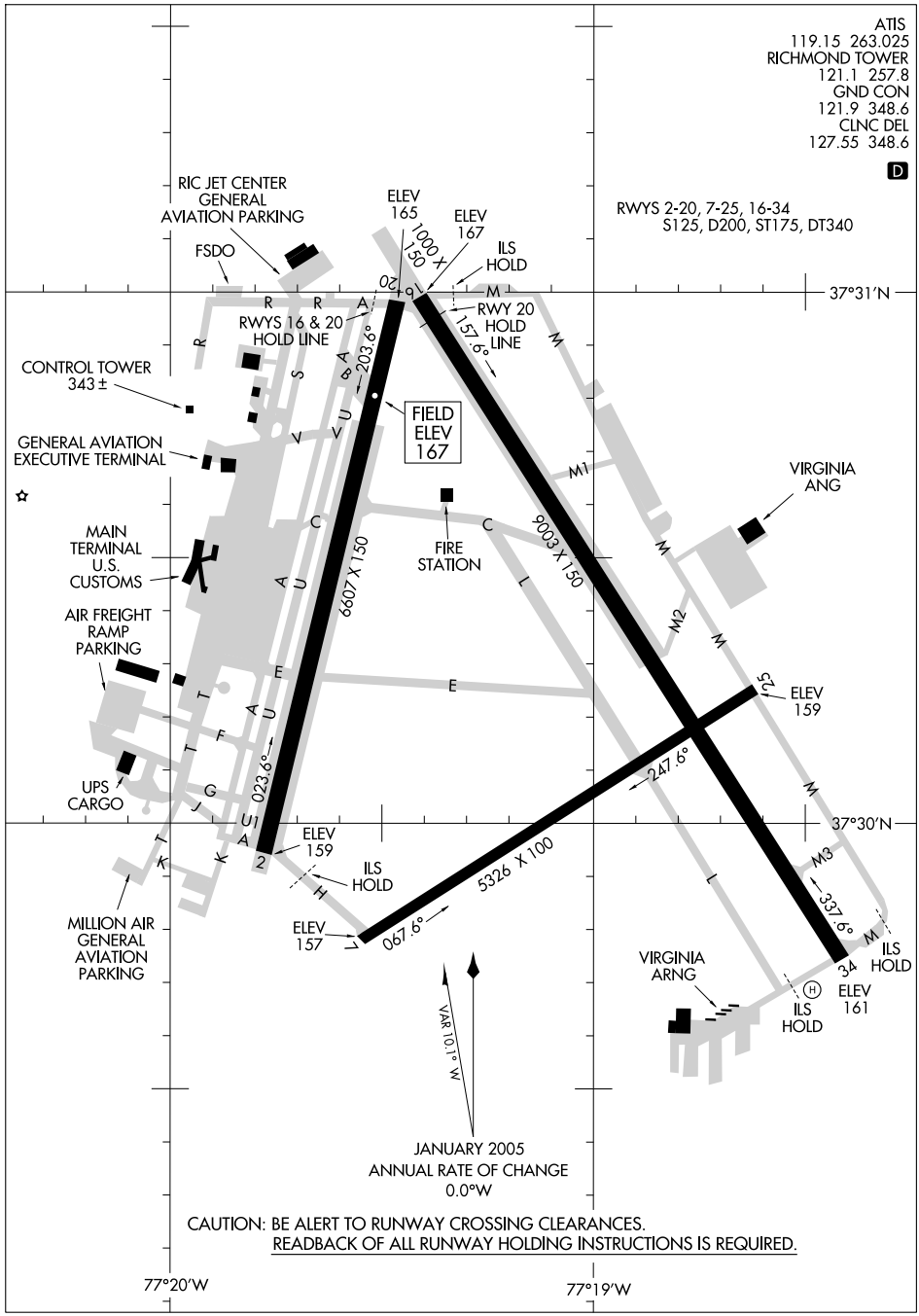
CATEGORY		A	B	C	D
LPV	DA	511-½ 293 (300-½)			
LNAV/VNAV	DA	599-1 381 (400-1)			
LNAV MDA		720-½ 502 (500-½)		720-1 502 (500-1)	
CIRCLING		720-1 483 (500-1)		720-1½ 483 (500-1½)	800-2 563 (600-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-347 (FAA)

RICHMOND INTL (RIC)
RICHMOND, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

COLIN FOUR DEPARTURE

ATIS 119.15 263.025
CLNC DEL
127.55 348.6
GND CON
121.9 348.6
RICHMOND TOWER
121.1 257.8
POTOMAC DEP CON
126.4 282.375

NOTTINGHAM
113.7 OTT
Chan 84

PATUXENT
117.6 PXT
Chan 123

BROOKE
114.5 BRV
Chan 92

R-184
R-122
R-238

COLIN
N38°05.99′
W76°39.85′
L-34-36

010°
(22)

MODEL
N37°44.03′
W76°41.45′

33

074°

R-010

RICHMOND
114.1 RIC
Chan 88

HARCUM
108.8 HCM
Chan 25

HANOVER COUNTY MUNI

CHESTERFIELD COUNTY

DINWIDDIE COUNTY

NOTE: Chart note to scale.

TAKE-OFF MINIMUMS:
Rwys 2, 7, 16, 20, 25, 34: STANDARD.

NOTES:
Rwy 2 cross DER at or above 30′ AGL/195′ MSL.
Rwy 7 cross DER at or above 34′ AGL/223′ MSL.
Rwy 16 cross DER at or above 22′ AGL/183′ MSL.
Rwy 20 cross DER at or above 35′ AGL/193′ MSL.
Rwy 25 cross DER at or above 20′ AGL/176′ MSL.
Rwy 34 cross DER at or above 10′ AGL/177′ MSL.

DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Climb runway heading or as assigned for radar vectors to intercept RIC R-074 to MODEL INT. Then via HCM R-010 to COLIN INT.

Climb and maintain 3000 feet or as assigned. Expect clearance to filed altitude/ flight level ten minutes after departure.

HI-ILS RWY 16

LOC I-RGJ	APCH CRS	Rwy ldg / TDZE / Arpt Elev
110.7	156°	9003 / 167 / 167

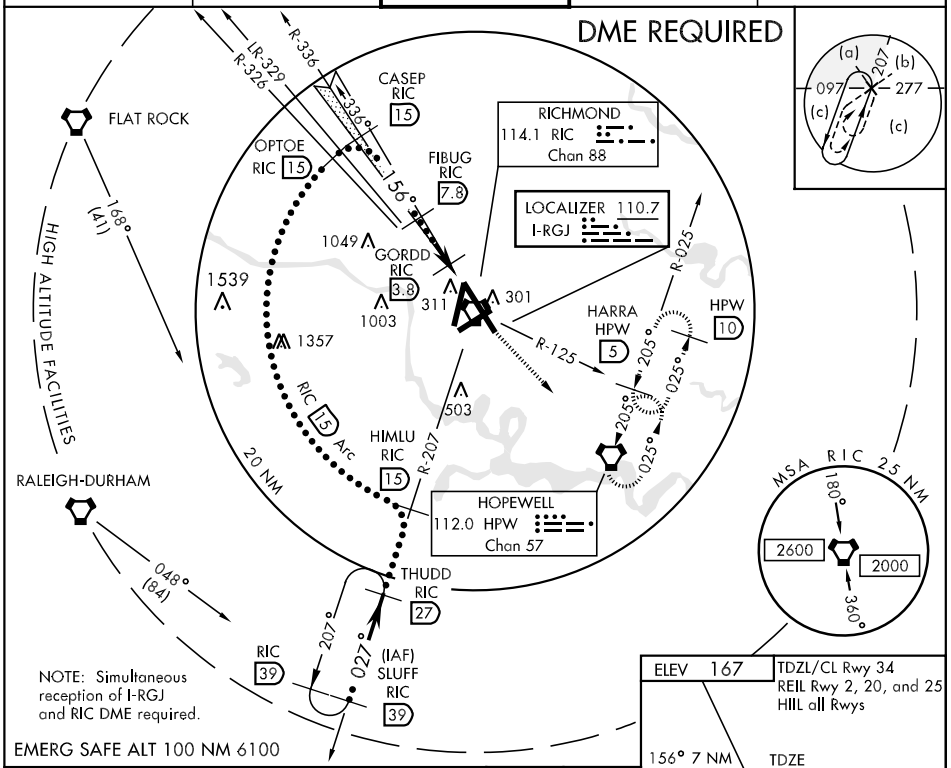
JAL-347 [USAF]

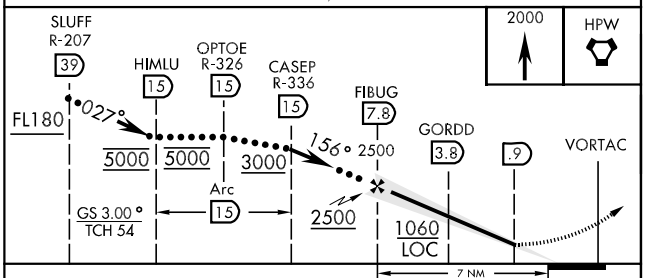
RICHMOND INTL (KRIC)

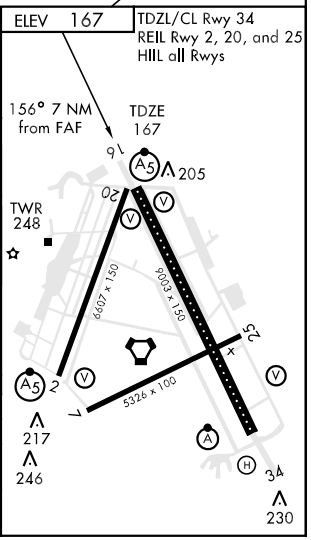
MALSR A5

MISSED APPROACH: Climb to 2000 direct HPW VORTAC and hold. (TACAN acft climbing left turn to 2000 via RIC R-125 to HARRA 5 DME and hold NE, LT, 205° inbound)

ATIS ★	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55







CATEGORY	C	D	E
S-ILS 16	367/24 200 (200-½)		
S-LOC 16	580/40 413 (500-¾)		580/50 413 (500-1)
CIRCLING	660-1½ 493 (500-1½)	720-2 553 (600-2)	740-2 573 (600-2)

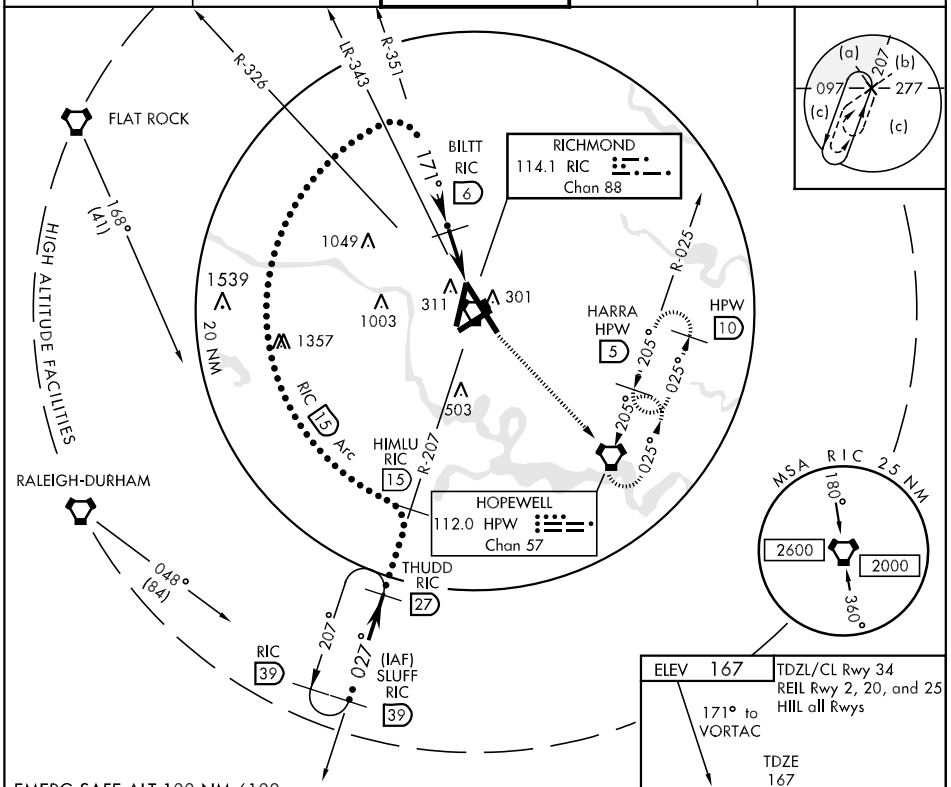
HI-TACAN RWY 16

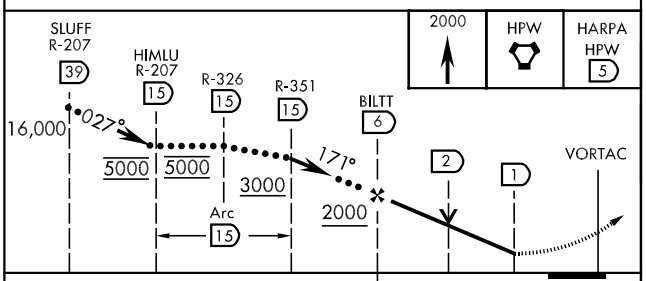
TACAN RIC Chan 88	APCH CRS 171°	Rwy ldg 9003 TDZE 167 Arpt Elev 167	JAL-347 [USAF]	RICHMOND INTL (KRIC)

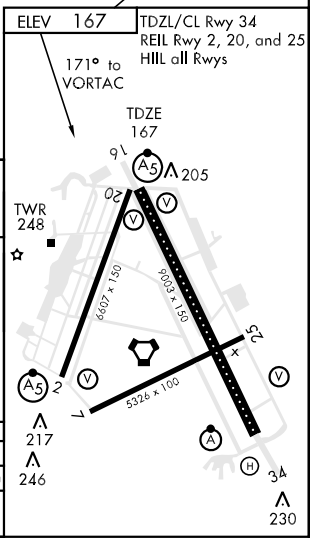
MALSR A5

MISSED APPROACH: Climb to 2000 direct to HPW VORTAC and hold. (TACAN acft continue to HARRA and hold.

ATIS ★	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







CATEGORY	C	D	E
S-16	640/40 473 (500-¾)	640/50 473 (500-1)	640/60 473(500-1¼)
CIRCLING	640-1½ 473 (500-1½)	720-2 553 (600-2)	740-2 573 (600-2)

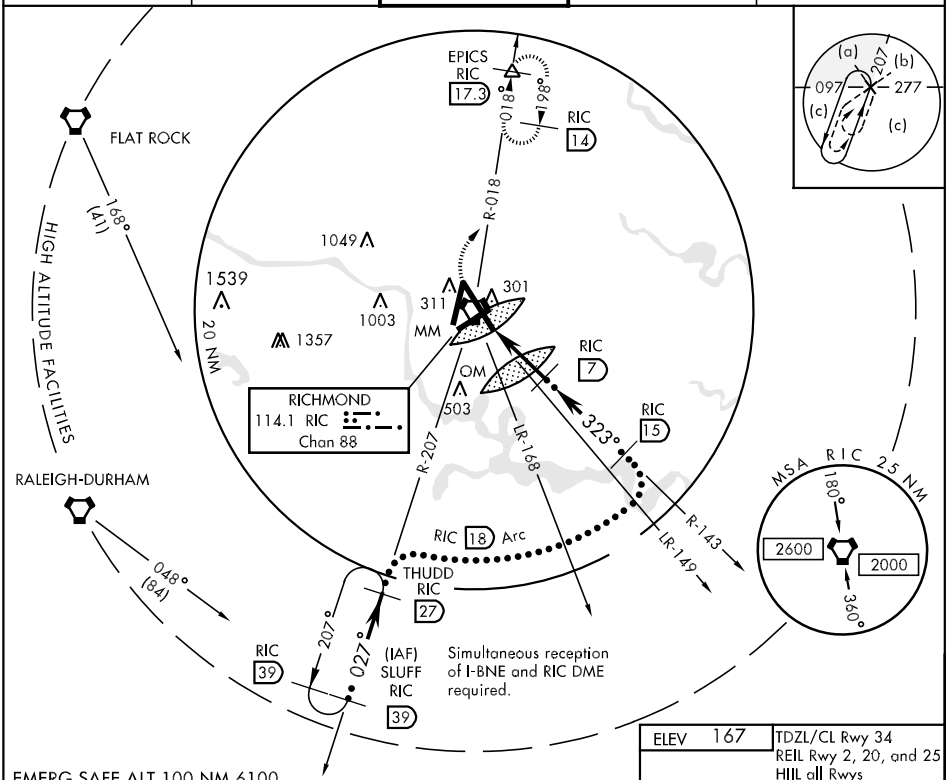
HI-TACAN RWY 34

TACAN RIC Chan 88	APCH CRS 323°	Rwy ldg 9003 TDZE 161 Arpt Elev 167	JAL-347 [USAF]	RICHMOND INTL (KRIC)

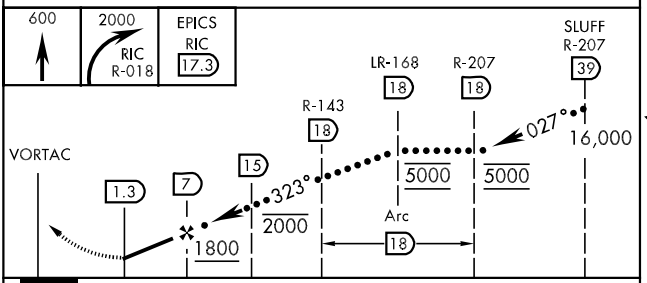
ALSF-2

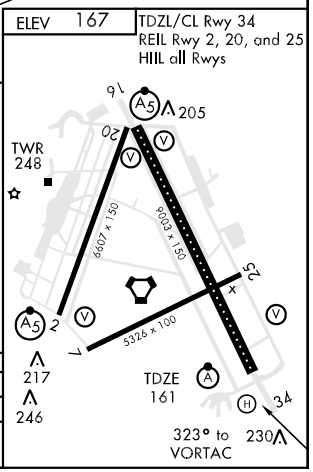
MISSED APPROACH: Climb straight ahead to 600, climbing right turn to 2000 via RIC R-018 to EPICS INT and hold.

ATIS ★	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6



EMERG SAFE ALT 100 NM 6100





CATEGORY	C	D	E
S-34	500/40 339 (400-¾)	500/50 339 (400-1)	
CIRCLING	640-1½ 473 (500-1½)	720-2 553 (600-2)	740-2 573 (600-2)

LOC I-RGJ	APP CRS	Rwy ldg	9003
110.7	156°	TDZE	167
		Apt Elev	167

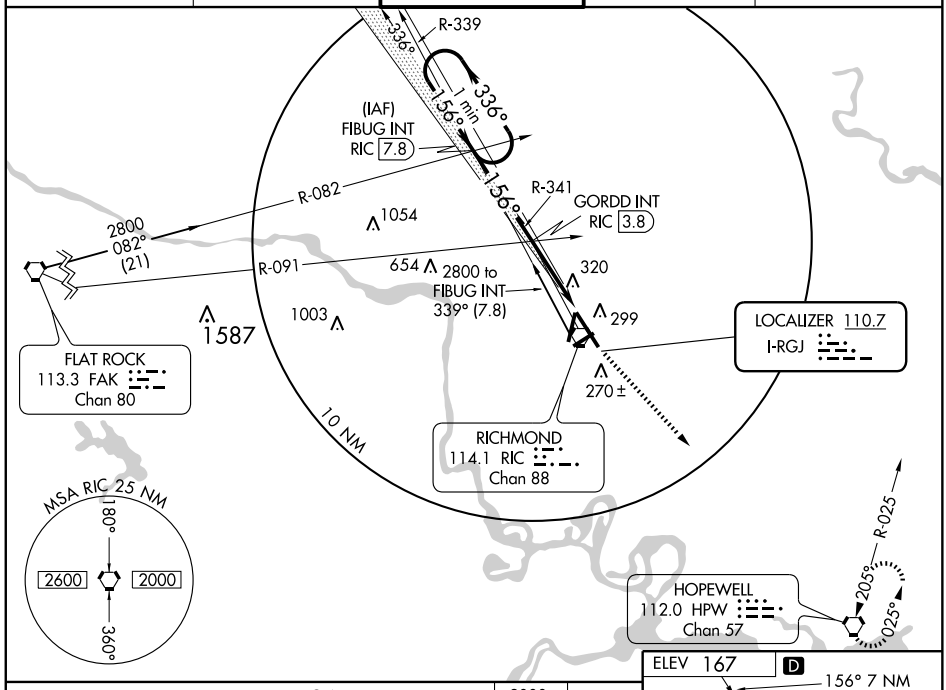
ILS or LOC RWY 16
RICHMOND INTL (RIC)

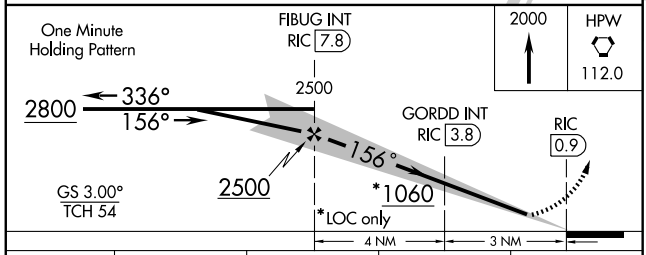
DME from RIC VORTAC.
** RVR 1800 authorized with the use of FD or AP or HUD to DA.

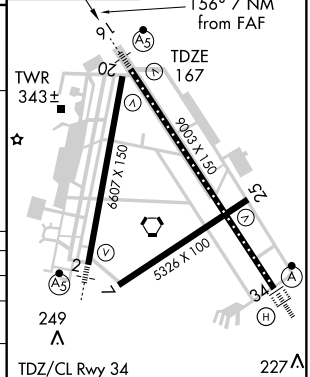
MALSR

MISSED APPROACH: Climb to 2000 direct HPW VORTAC and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25

CATEGORY	A	B	C	D
S-ILS 16	** 367/24 200 (200-½)			
S-LOC 16	1060/40 893 (900-¾)		1060-2¼ 893 (900-2¼)	1060-2½ 893 (900-2½)
CIRCLING	1060-1¼ 893 (900-1¼)		1060-2¾ 893 (900-2¾)	1060-3 893 (900-3)
GORDD FIX MINIMUMS				
S-LOC 16	580/24 413 (500-½)		580/40 413 (500-¾)	
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

FAF to MAP 7 NM					
Knots	60	90	120	150	180
Min:Sec	7:00	4:40	3:30	2:48	2:20

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC I-BNE	APP CRS	Rwy ldg	9003
110.7	337°	TDZE	161
		Apt Elev	167

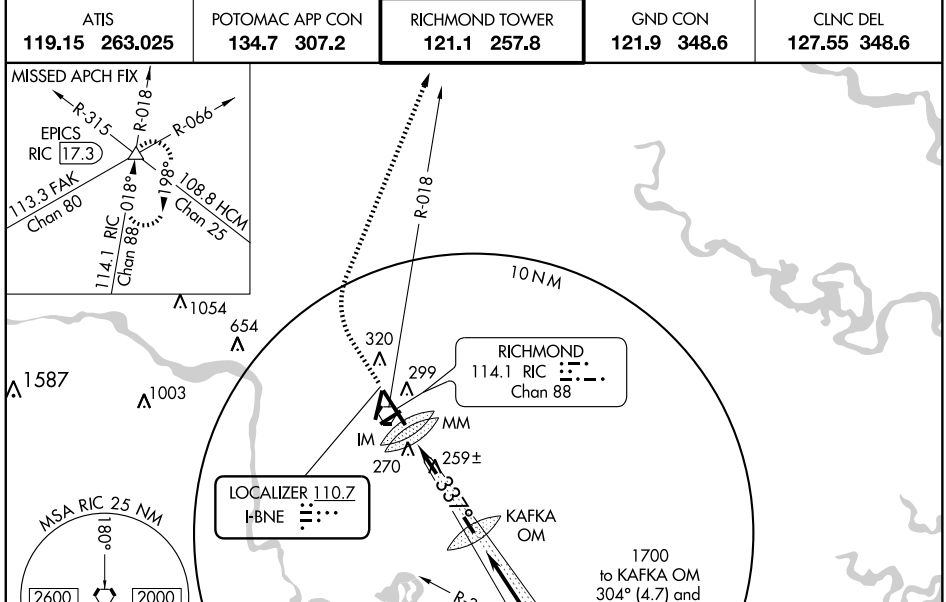
ILS or LOC RWY 34
RICHMOND INTL (RIC)

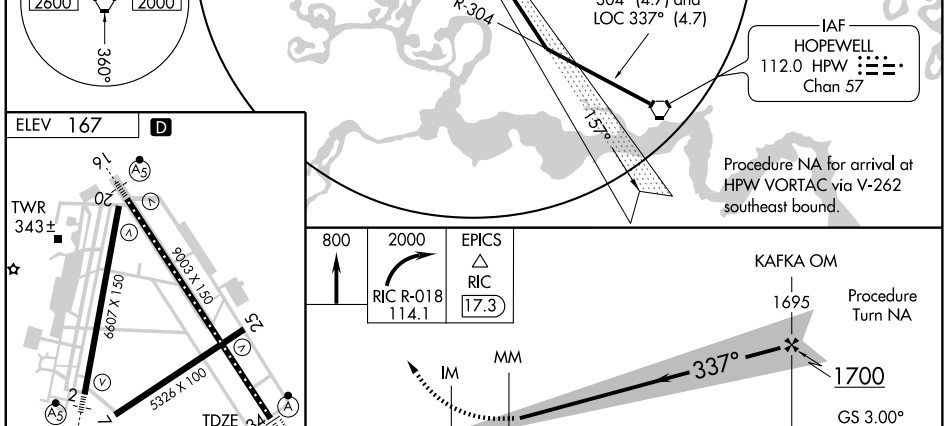
For inoperative ALSF-2, increase S-ILS 34 Cat E visibility to RVR 4000 and S-LOC 34 Cat E visibility to RVR 6000.

ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 via RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

CATEGORY	A	B	C	D	E
S-ILS 34	361/18 200 (200-½)				361/24 200 (200-½)
S-LOC 34	520/24 359 (400-½)			520/40 359 (400-¾)	
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)	740-2 573 (600-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

LOC I-EZD	APP CRS	Rwy ldg	6607
110.9	022°	TDZE	161
		Apt Elev	167

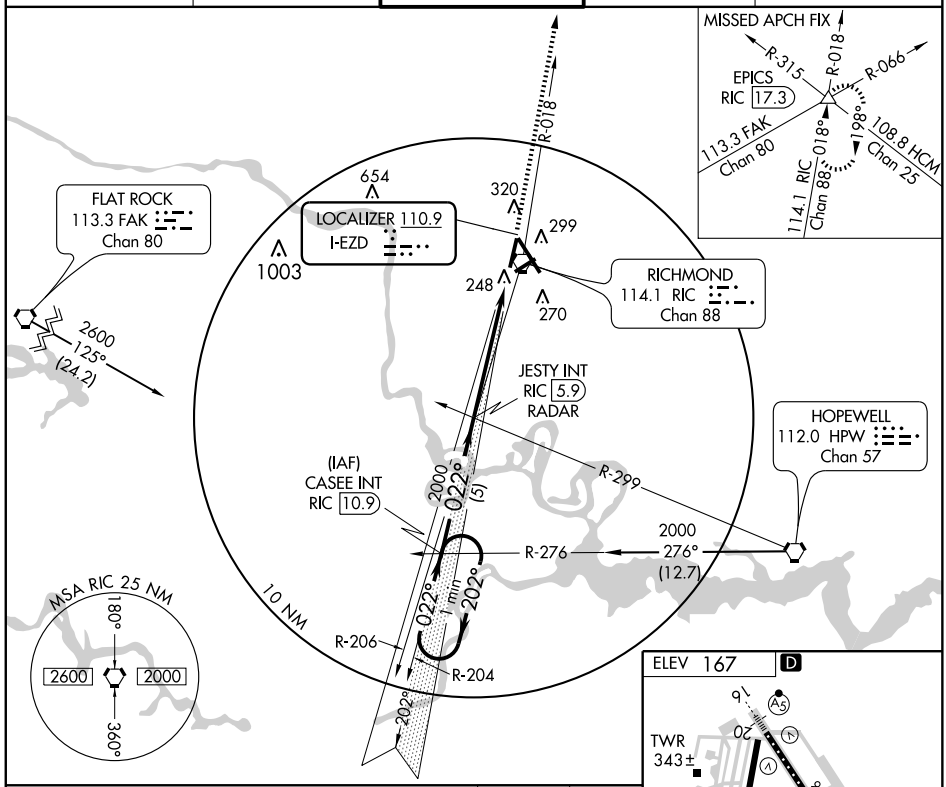
ILS RWY 2
RICHMOND INTL (RIC)

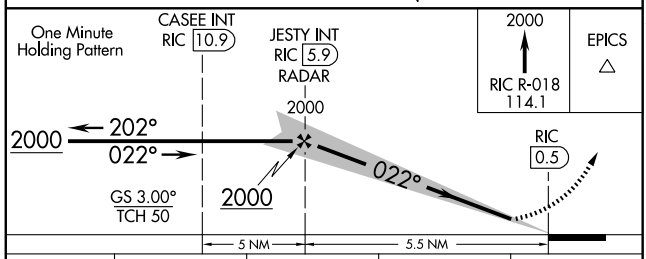
Inoperative table does not apply to S-ILS 2.
For inoperative MALSR, increase S-LOC 2 Cat. A and B visibility to 1.

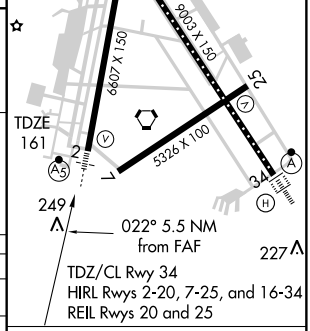
MALSR

MISSED APPROACH: Climb to 2000 via RIC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







CATEGORY	A	B	C	D
S-ILS 2	411-¾ 250 (300-¾)			
S-LOC 2	580-¾ 419 (500-¾)			
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

NE-3. 14 JAN 2010 to 11 FEB 2010

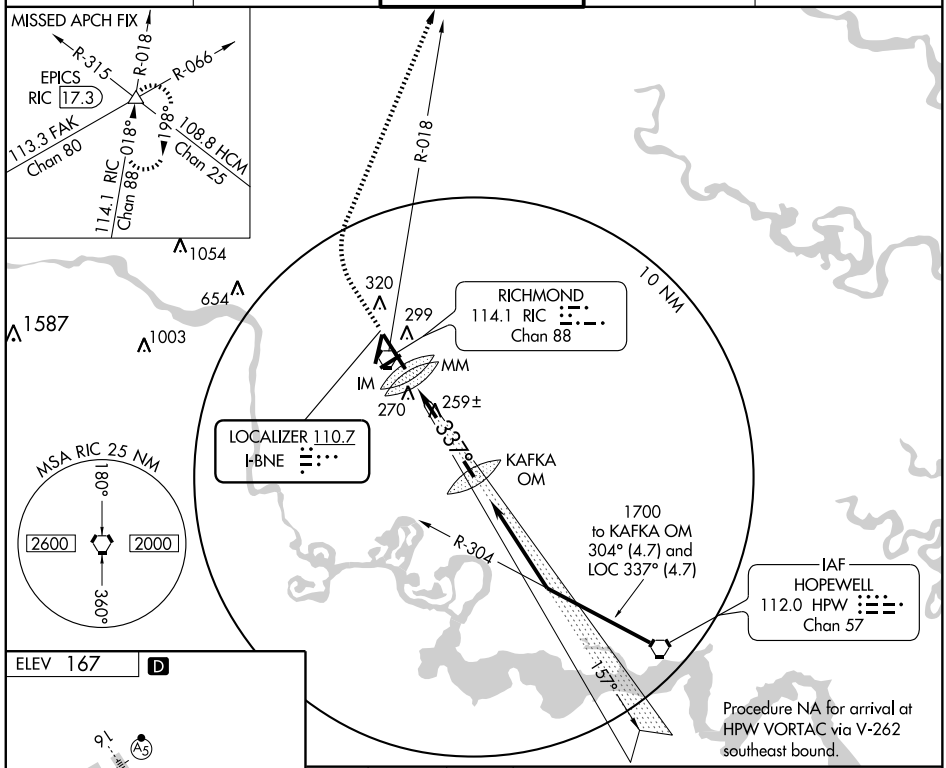
LOC I-BNE	APP CRS	Rwy ldg	9003
110.7	337°	TDZE	161
		Apt Elev	167

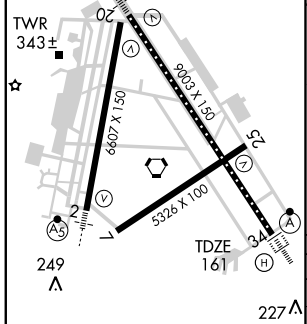
ILS RWY 34 (CAT II)
RICHMOND INTL (RIC)

ALSF-2

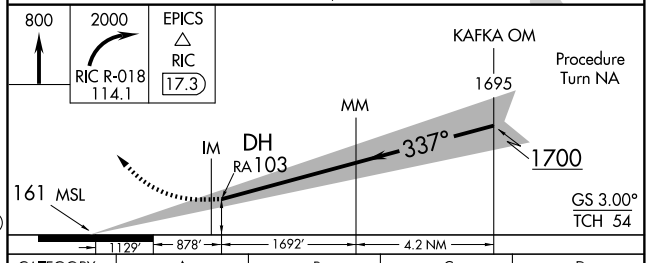
MISSED APPROACH: Climb to 800 then climbing right turn to 2000 via RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25



CATEGORY	A	B	C	D
S-ILS 34	RA 103/12 100 DA 261			

CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NE-3, 14 JAN 2010 to 11 FEB 2010

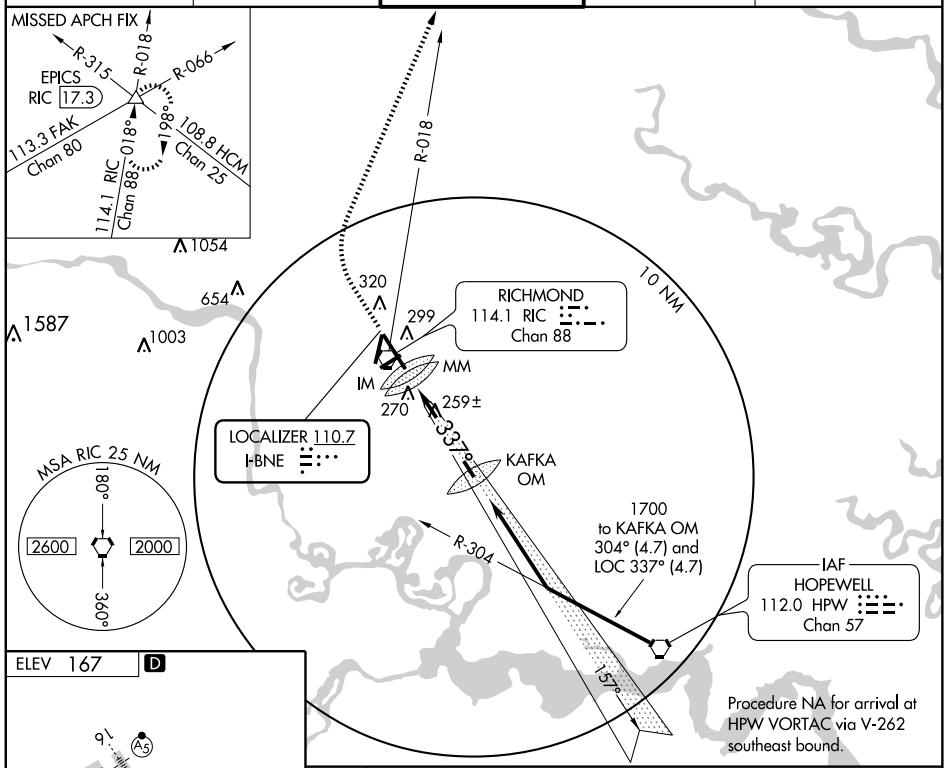
LOC I-BNE	APP CRS	Rwy ldg	9003
110.7	337°	TDZE	161
		Apt Elev	167

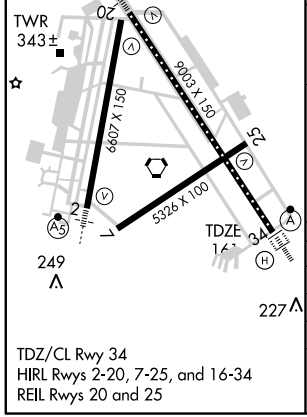
ILS RWY 34 (CAT III)
RICHMOND INTL (RIC)

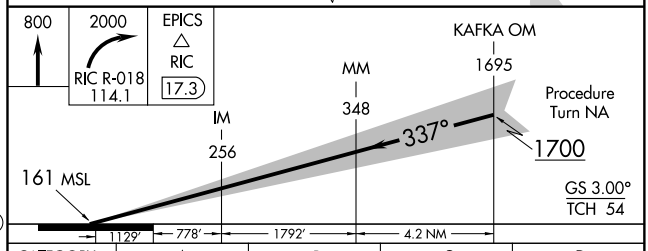
ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 via RIC VORTAC R-018 to EPICS INT/RIC 17.3 DME and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







CATEGORY	A	B	C	D
S-ILS 34	CAT IIIa	RVR 07		
S-ILS 34	CAT IIIb	RVR 06		
S-ILS 34	CAT IIIc	NA		

TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25

CATEGORY III ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NE-3. 14 JAN 2010 to 11 FEB 2010

RNAV (GPS) RWY 2
RICHMOND INTL (RIC)

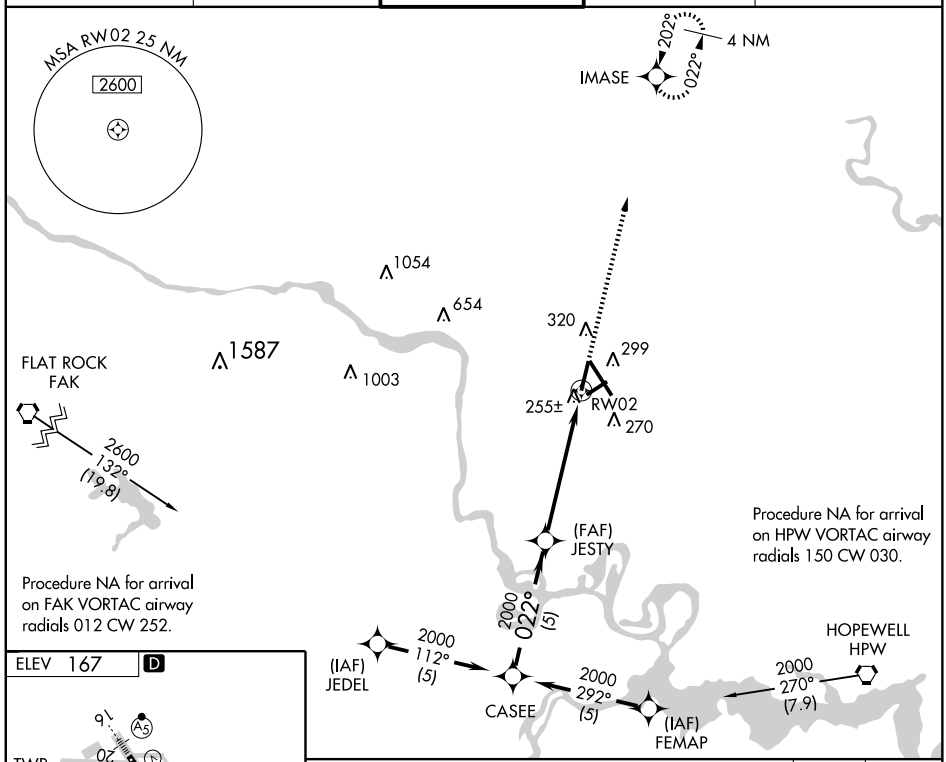
APP CRS	Rwy ldg	6607
022°	TDZE	161
	Apt Elev	167

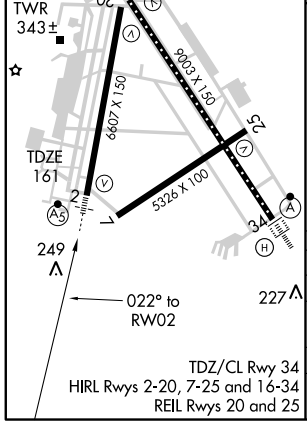
For inoperative MALSR, increase LNAV Cats A and B visibility to 1. Baro-VNAV NA below -15°C (5°F). GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MALSR

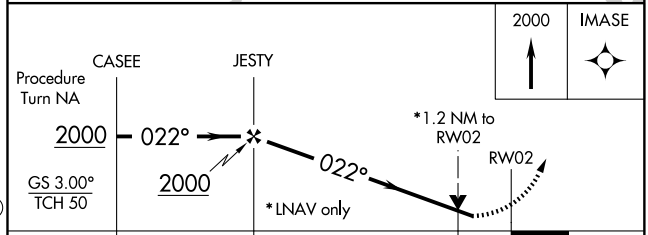
MISSED APPROACH: Climb to 2000 direct IMASE WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	520-¾ 359 (400-¾)			
LNAV MDA	580-¾ 419 (500-¾)			
CIRCLING	660-1¼ 493 (500-1¼)		660-1½ 493 (500-1½)	720-2 553 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5326
066°	TDZE	158
	Apt Elev	167

RNAV (GPS) RWY 7
RICHMOND INTL (RIC)

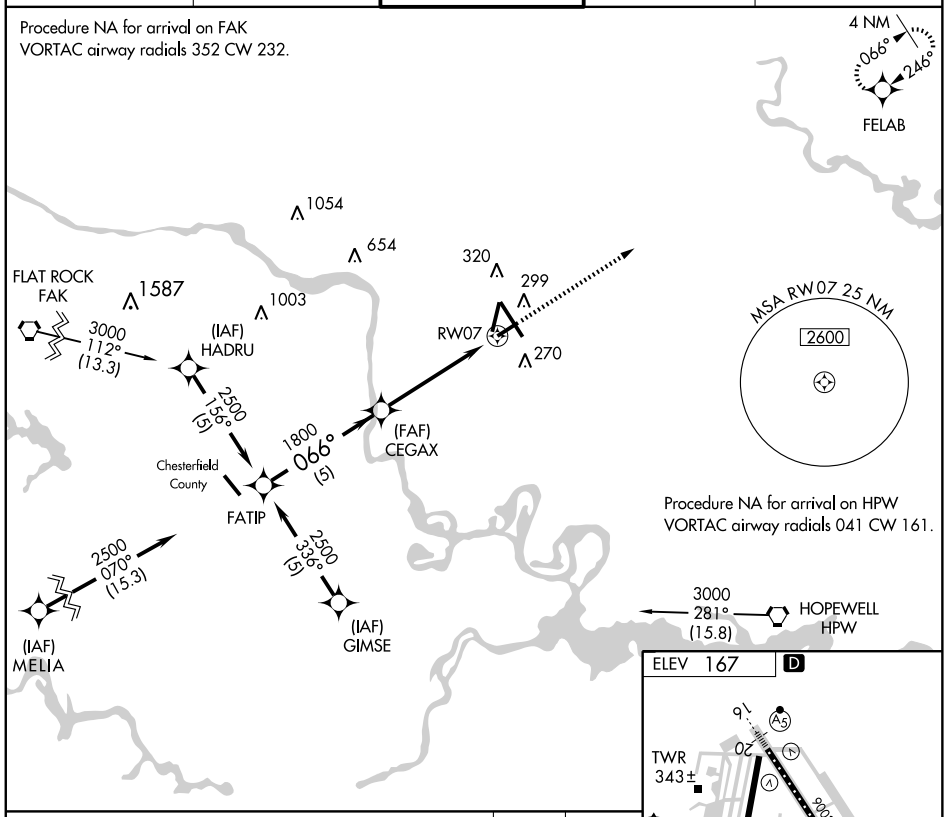
T
NA

Straight in minimums NA at night.
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

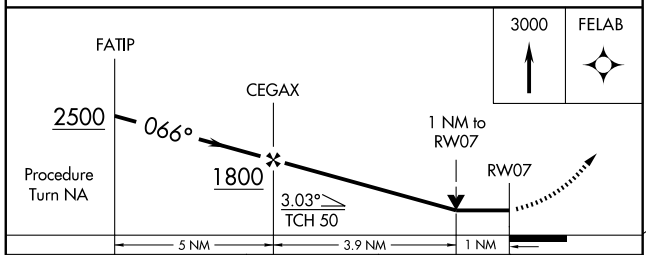
MISSED APPROACH: Climb to 3000 direct FELAB WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6

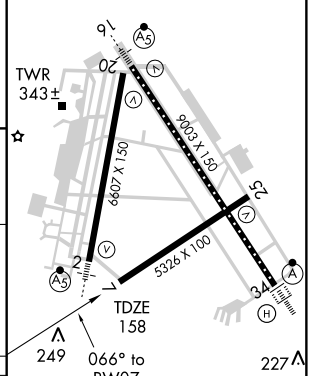
Procedure NA for arrival on FAK
VORTAC airway radials 352 CW 232.



Procedure NA for arrival on HPW
VORTAC airway radials 041 CW 161.



CATEGORY	A	B	C	D
LNAV MDA	540-1 382 (400-1)			540-1¼ 382 (400-1¼)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)



TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	9003
156°	TDZE	167
	Apt Elev	167

RNAV (GPS) RWY 16
RICHMOND INTL (RIC)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA.

NA

MALSR

MISSED APPROACH: Climb to 2500 direct HAGLI WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6

Procedure NA for arrival on FAK VORTAC airway radials 312 CW 192.

Procedure NA for arrival on V376 northeast bound.

(IAF) HIBOM — EPICS — 3000 246° (6.2) — 3000 246° (5) — IFPIG — (IAF) WAKAL — 3000 066° (5) — 2500 156° (5) — 538 — (FAF) FIBUG — 3000 072° (15) — FLAT ROCK FAK — 1054 — 654 — 320 ± — 320 — RW16 — 299 — 270 — 1587 — 1003 — MSA RW16 25 NM 2600 — HAGLI — 57° — 337° — 4 NM

ELEV 167 D

156° to RW16

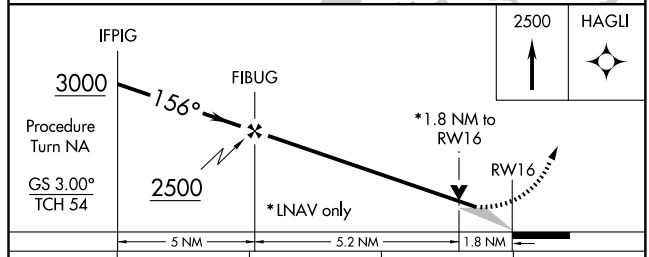
TDZE 167

TWR 343±

9003 X 150 — 6607 X 150 — 5326 X 100

249 — 227

TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	605/50 438 (500-1)			
LNAV MDA	800/24 633 (700-½)		800/60 633 (700-1¼)	800-1½ 633 (700-1½)
CIRCLING	800-1 633 (700-1)		800-1¾ 633 (700-1¾)	800-2 633 (700-2)

APP CRS	Rwy ldg	6607
202°	TDZE	167
	Apt Elev	167

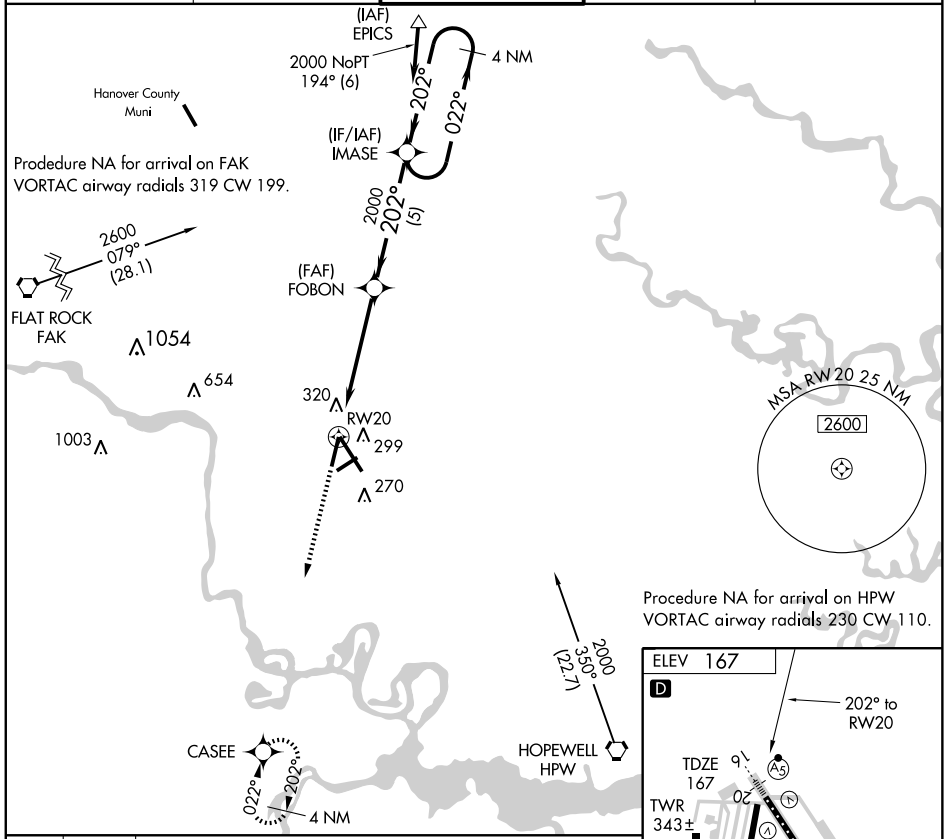
RNAV (GPS) RWY 20
RICHMOND INTL (RIC)

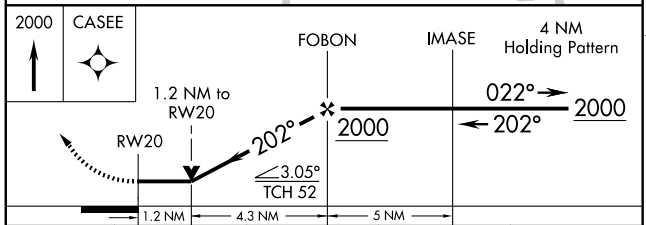
T
A NA

GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct CASEE WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25

CATEGORY	A	B	C	D
LNAV MDA	600-1	433 (500-1)	600-1¼ 433 (500-1¼)	600-1½ 433 (500-1½)
CIRCLING	660-1	493 (500-1)	660-1½ 493 (500-1½)	720-2 553 (600-2)

APP CRS	Rwy ldg	5326
247°	TDZE	160
	Apt Elev	167

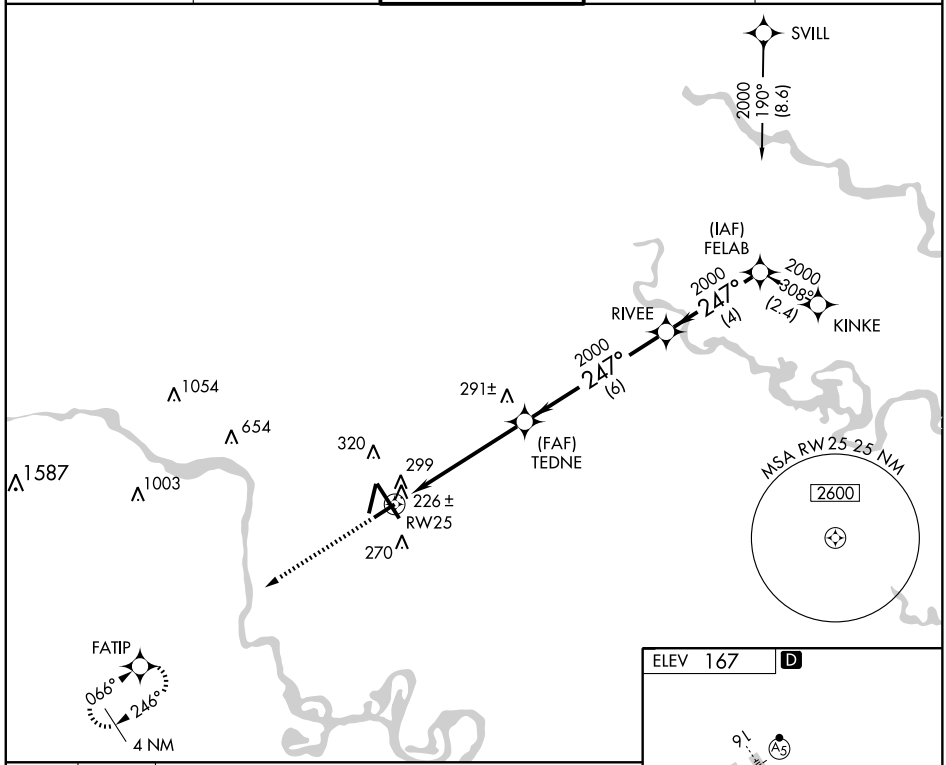
RNAV (GPS) RWY 25
RICHMOND INTL (RIC)

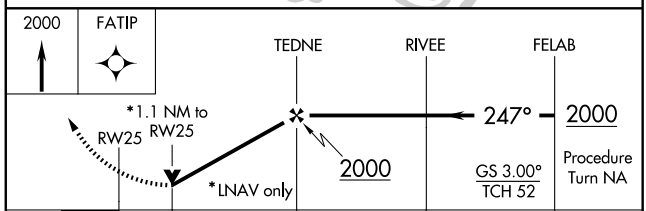
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -15°C (5°F)

NA

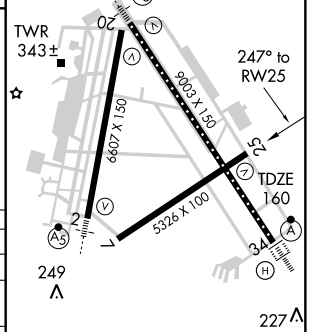
MISSED APPROACH: Climb to 2000 direct FATIP WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/ VNAV DA	560-1½ 400 (400-1½)			
LNAV MDA	600-1 440 (500-1)		600-1¼ 440 (500-1¼)	600-1½ 440 (500-1½)
CIRCLING	660-1½ 493 (500-1½)			720-2 553 (600-2)



TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	9003
337°	TDZE	161
	Apt Elev	167

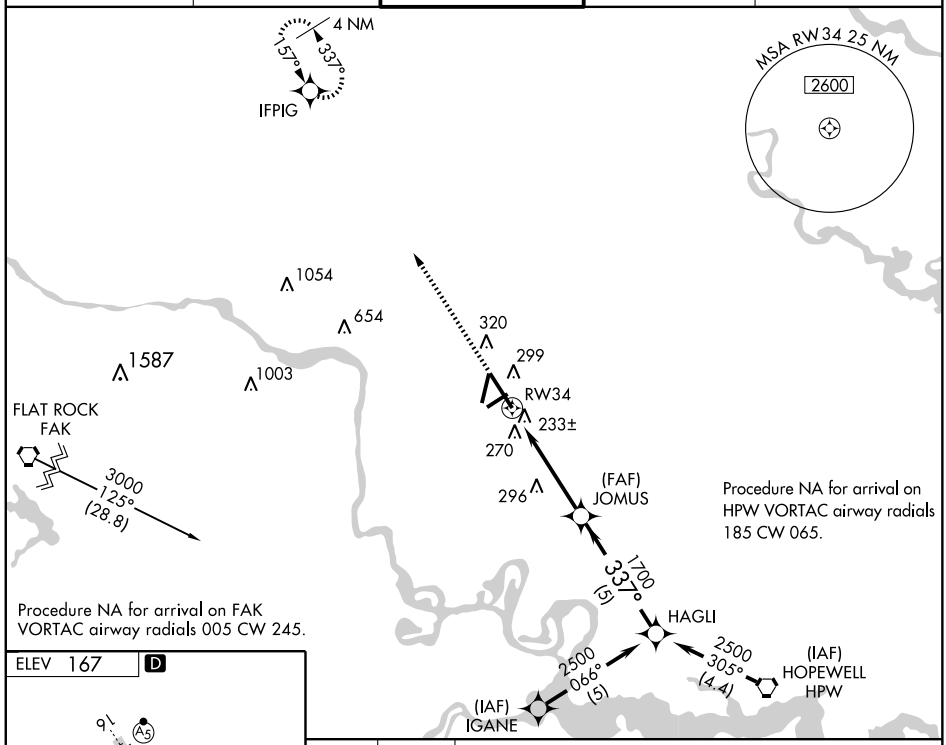
RNAV (GPS) RWY 34
RICHMOND INTL (RIC)

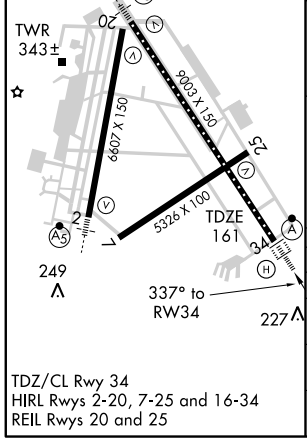
NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). For inoperative ALSF, increase LNAV Cat D visibility to RVR 6000. DME/DME RNP-0.3 NA.

ALSF-2

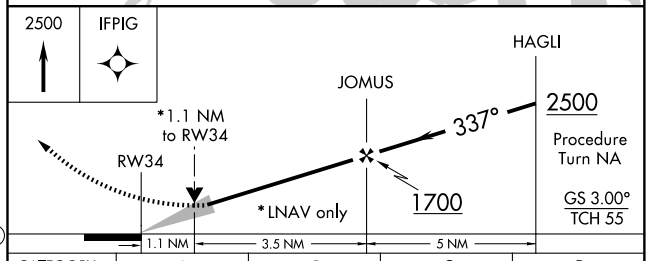
MISSED APPROACH: Climb to 2500 direct IFPIG WP and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/ VNAV DA	570/50 409 (500-1)			
LNAV MDA	560/24 399 (400-½)			560/50 399 (400-1)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC RIC	APP CRS	Rwy ldg	6607
114.1	041°	TDZE	161
Chan 88		Apt Elev	167

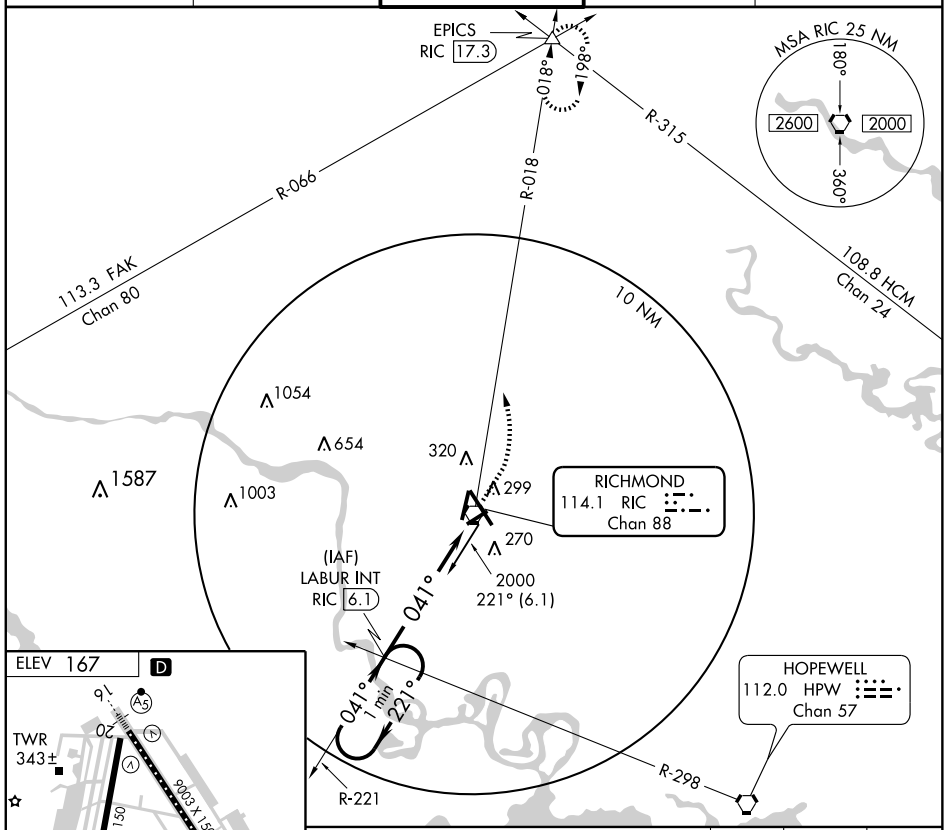
VOR RWY 2
RICHMOND INTL (RIC)

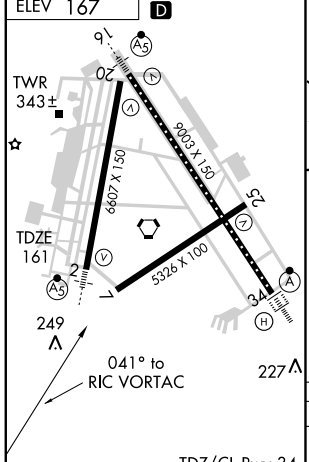
Inoperative table does not apply.

MALSR

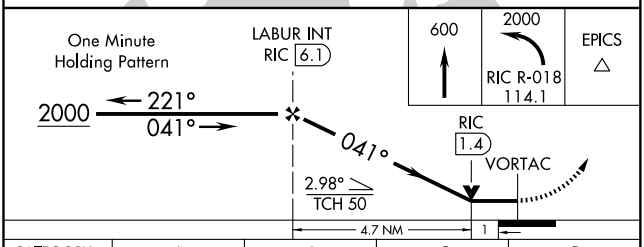
MISSED APPROACH: Climb to 600 then climbing left turn to 2000 via RIC R-018 to EPICS INT and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25



CATEGORY	A	B	C	D
S-2	540-1 379 (400-1)			540-1¼ 379 (400-1¼)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC RIC 114.1 Chan 88	APP CRS 171°	Rwy ldg 9003 TDZE 167 Apt Elev 167

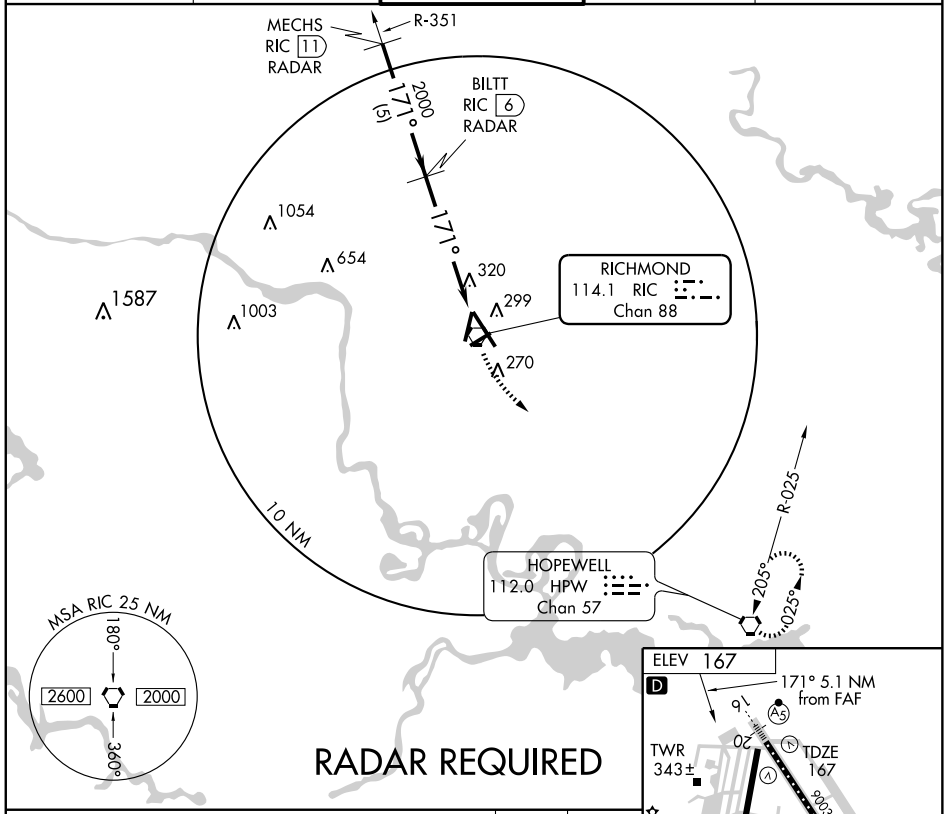
VOR RWY 16
RICHMOND INTL (RIC)

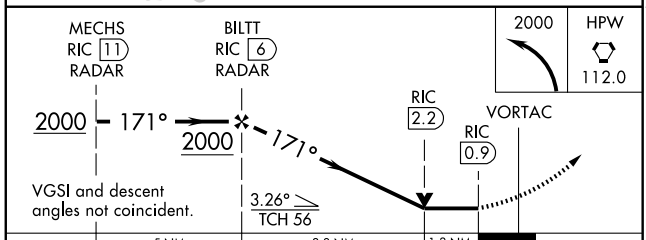
DME or RADAR REQUIRED

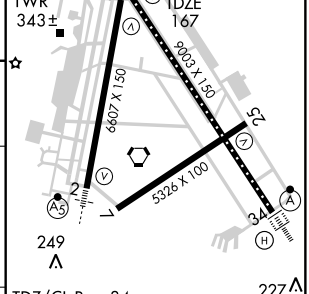
MALSR

MISSED APPROACH: Climbing left turn to 2000 direct HPW VORTAC and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25

CATEGORY	A	B	C	D
S-16	640/24 473 (500-½)		640/40 473 (500-¾)	640/50 473 (500-1)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NE-3, 14 JAN 2010 to 11 FEB 2010

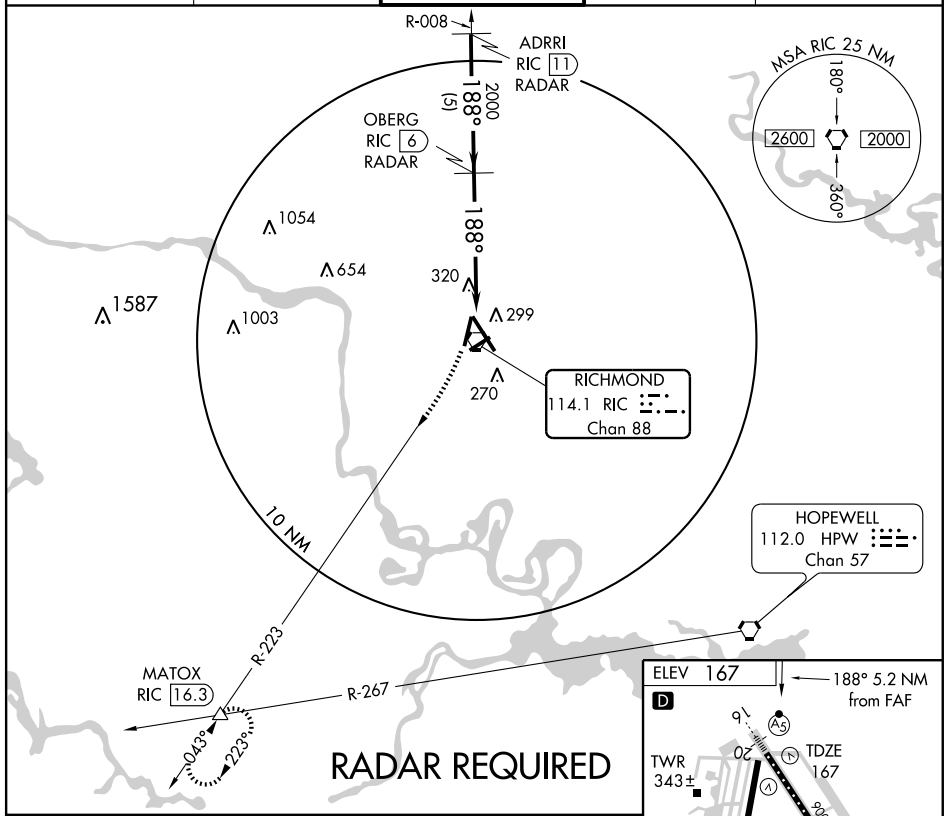
VORTAC RIC	APP CRS	Rwy ldg	6607
114.1	188°	TDZE	167
Chan 88		Apt Elev	167

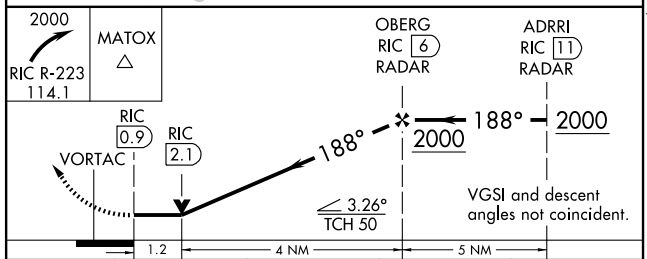
VOR RWY 20
RICHMOND INTL (RIC)

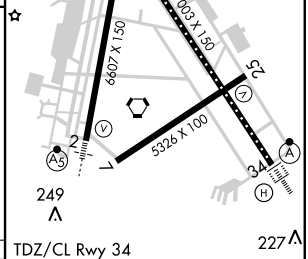
DME or RADAR REQUIRED

MISSED APPROACH: Climbing right turn to 2000 via RIC R-223 to MATOX INT/RIC 16.3 DME and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6







TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25

CATEGORY	A	B	C	D
S-20	640-1 473 (500-1)		640-1¼ 473 (500-1¼)	640-1½ 473 (500-1½)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NE-3, 14 JAN 2010 to 11 FEB 2010

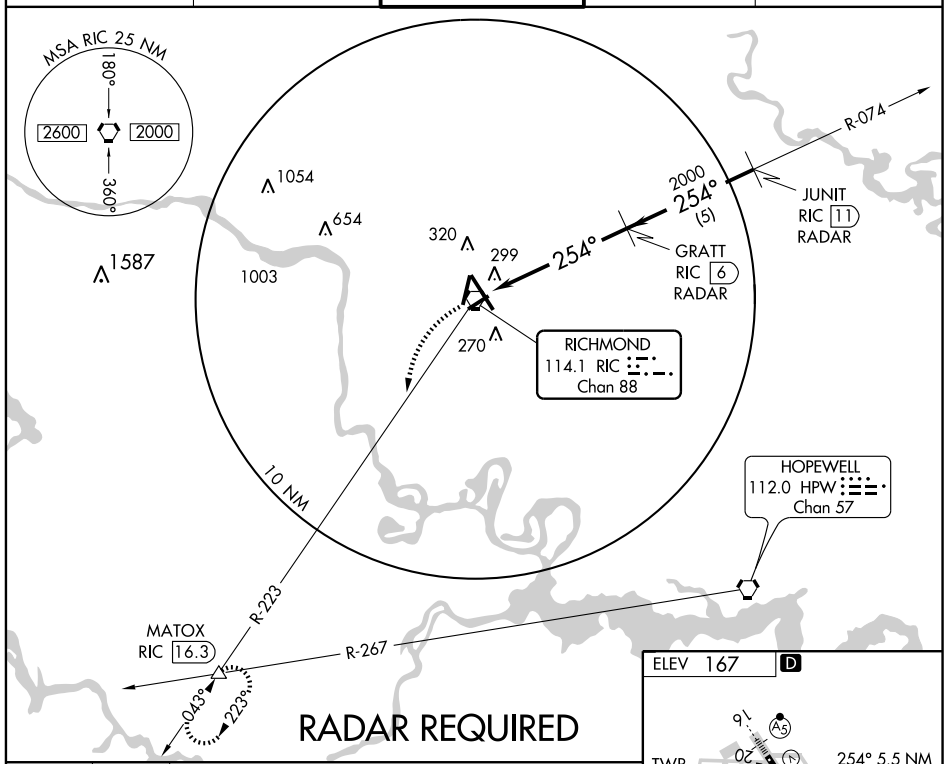
VORTAC RIC 114.1 Chan 88	APP CRS 254°	Rwy ldg 5326 TDZE 160 Apt Elev 167

VOR RWY 25
RICHMOND INTL (RIC)

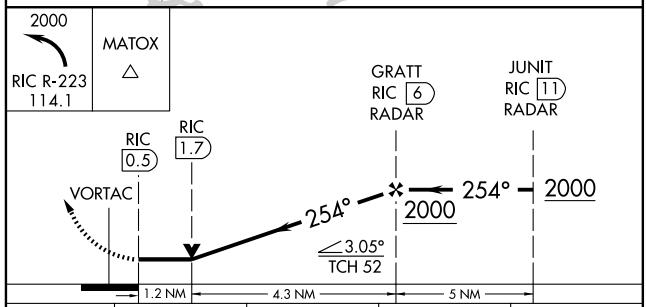
DME or RADAR REQUIRED

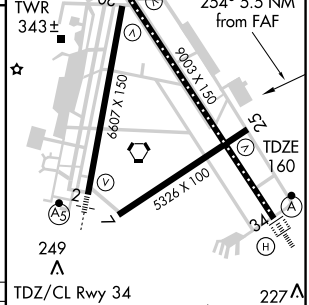
MISSED APPROACH: Climbing left turn to 2000 via RIC R-223 to MATOX INT and hold.

ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6



RADAR REQUIRED





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25 and 16-34
REIL Rwys 20 and 25

CATEGORY	A	B	C	D
S-25	600-1 440 (500-1)		600-1¼ 440 (500-1¼)	600-1½ 440 (500-1½)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

NE-3, 14 JAN 2010 to 11 FEB 2010

VORTAC RIC 114.1 Chan 88	APP CRS 323°	Rwy ldg 9003 TDZE 161 Apt Elev 167

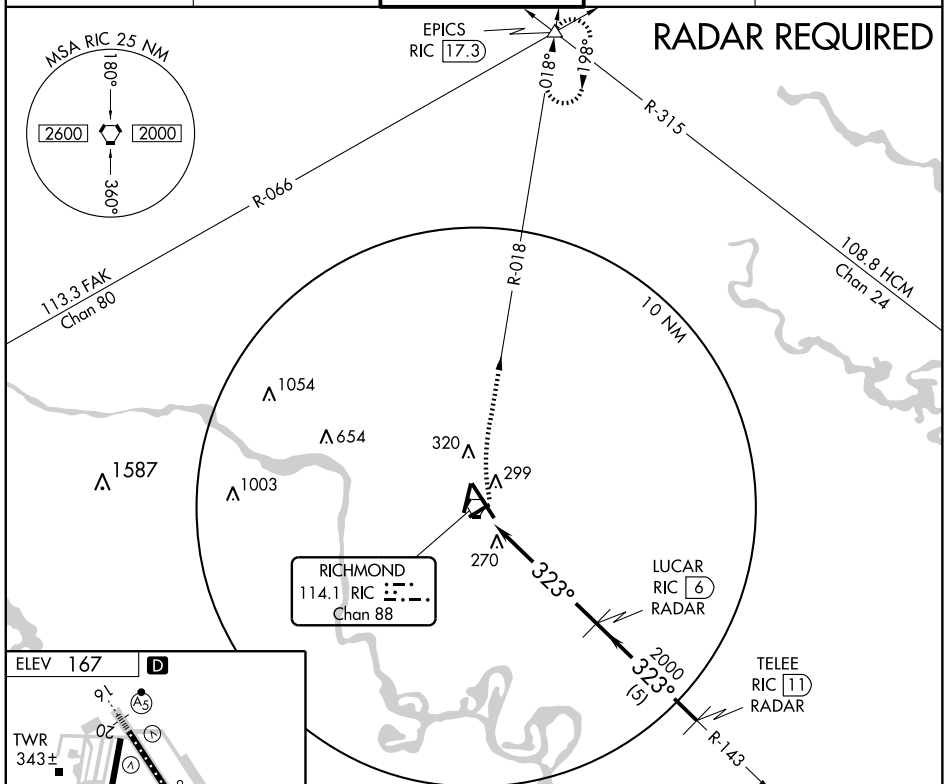
VOR RWY 34
RICHMOND INTL (RIC)

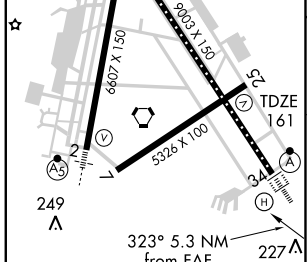
For inoperative ALSF, increase S-34 Cat D visibility to RVR 6000. DME or RADAR REQUIRED

ALSF-2

MISSED APPROACH: Climbing right turn to 2000 via RIC R-018 to EPICS INT and hold.

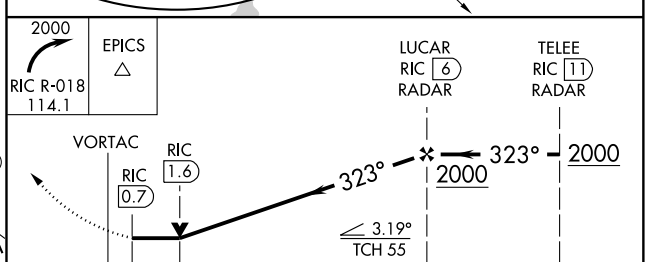
ATIS	POTOMAC APP CON	RICHMOND TOWER	GND CON	CLNC DEL
119.15 263.025	134.7 307.2	121.1 257.8	121.9 348.6	127.55 348.6





TDZ/CL Rwy 34
HIRL Rwys 2-20, 7-25, and 16-34
REIL Rwys 20 and 25

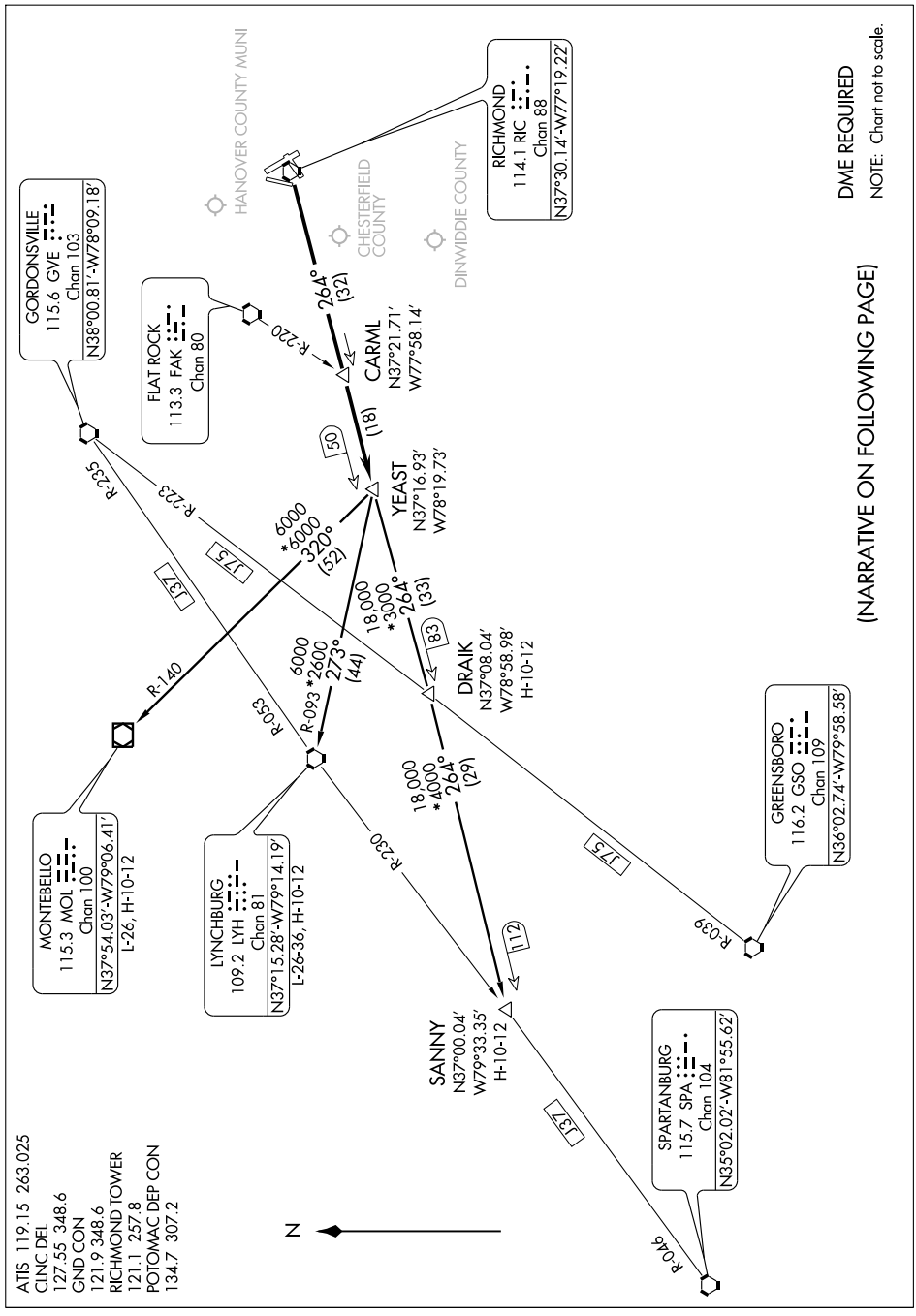
FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46



CATEGORY	A	B	C	D
S-34	540/24 379 (400-½)			540/50 379 (400-1)
CIRCLING	660-1 493 (500-1)		660-1½ 493 (500-1½)	720-2 553 (600-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

YEAST ONE DEPARTURE



DME REQUIRED

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

YEAST ONE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

Fly runway heading or as assigned for radar vectors to intercept the RIC R-264 to YEAST intersection, then via assigned transition. Climb and maintain 3000 or assigned altitude. Expect clearance to requested altitude/flight level ten minutes after departure.

MONTEBELLO TRANSITION (YEAST1.MOL): From over YEAST INT via MOL VOR/DME R-140 to MOL VOR/DME.

LYNCHBURG TRANSITION (YEAST1.LYH): From over YEAST INT via LYH VORTAC R-093 to LYH VORTAC.

DRAIK TRANSITION (YEAST1.DRAIK): From over YEAST INT via RIC VORTAC R-264 to DRAIK INT.

SANNY TRANSITION (YEAST1.SANNY): From over YEAST INT via RIC VORTAC R-264 to SANNY INT.

LOC/DME I-OFP	APP CRS	Rwy ldg	5402
109.7	159°	TDZE	207
Chan 34		Apt Elev	207

LOC RWY 16

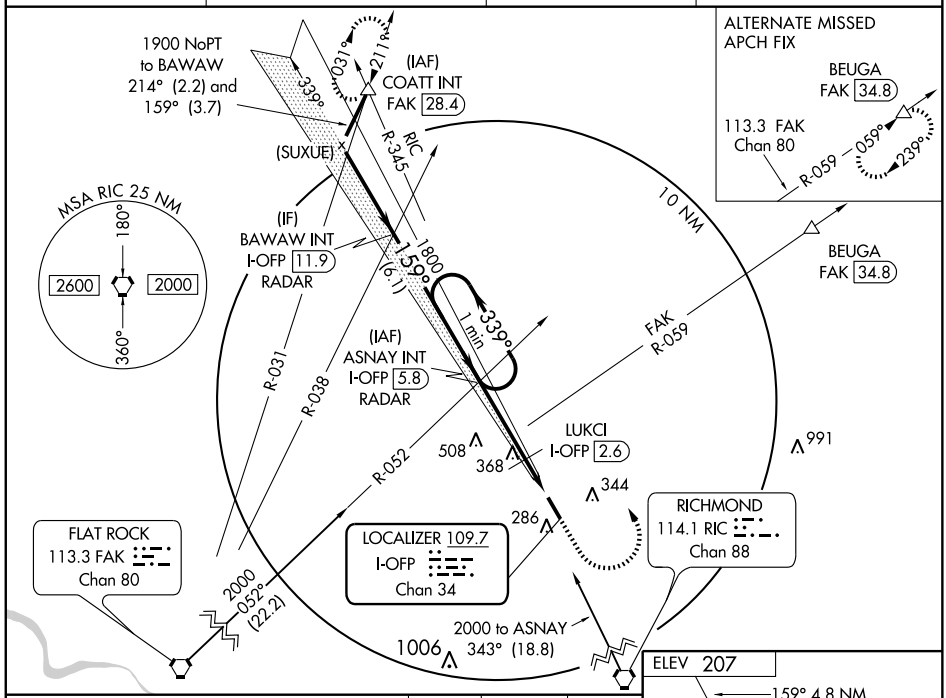
RICHMOND/ASHLAND/ HANOVER COUNTY MUNI (OFP)

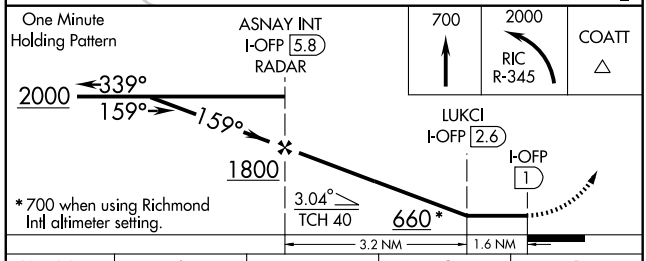
Circling to Rwy 34 NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received, use Richmond Intl altimeter setting and increase all MDAs 40 feet.

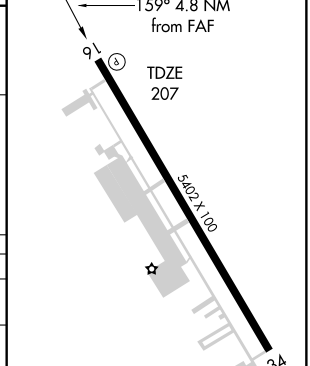
NA

MISSED APPROACH: Climb to 700 then climbing left turn to 2000 via RIC VORTAC R-345 to COATT INT and hold.

ASOS	POTOMAC APP CON	CLNC DEL	UNICOM
119.025	134.7 307.2	125.4	122.7 (CTAF) L







REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

CATEGORY	A	B	C	D
S-16	660-1 453 (500-1)		660 - 1¼ 453 (500-1¼)	660 - 1½ 453 (500-1½)
CIRCLING	660-1 453 (500-1)		660 - 1½ 453 (500-1½)	760 - 2 553 (600-2)
LUKCI FIX MINIMUMS				
S-16	560-1 353 (400-1)			560 - 1¼ 353 (400-1¼)
CIRCLING	620 - 1 413 (500-1)	660 - 1 453 (500-1)	660 - 1½ 453 (500-1½)	760 - 2 553 (600-2)

FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 42904 W16A	APP CRS 159°	Rwy ldg 5402 TDZE 207 Apt Elev 207

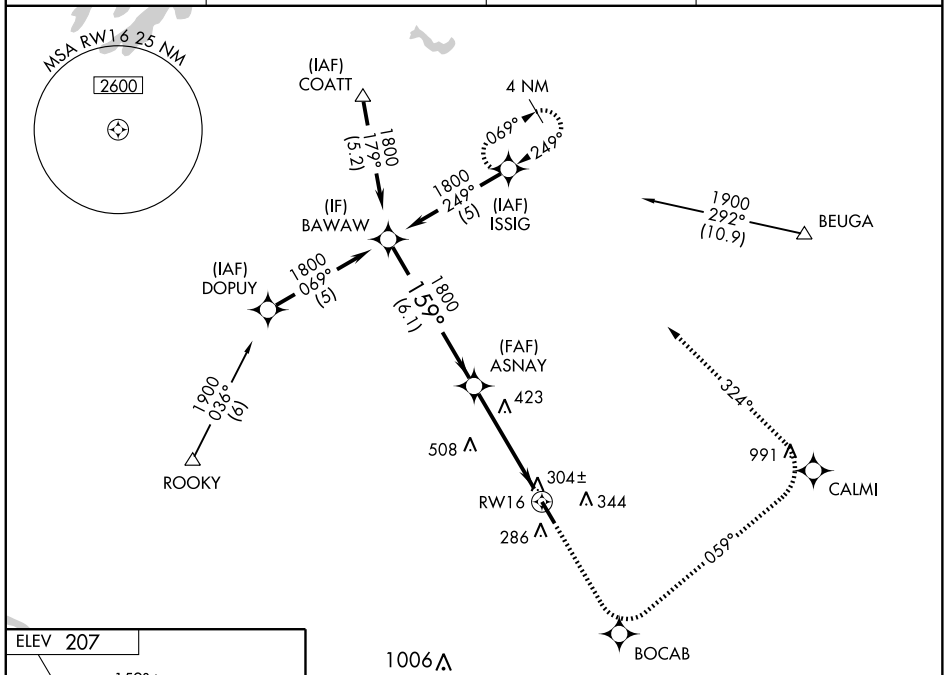
RNAV (GPS) RWY 16

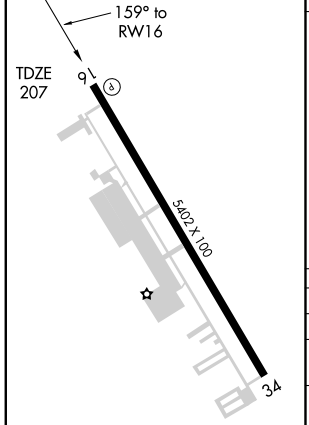
RICHMOND/ASHLAND / HANOVER COUNTY MUNI (OFP)

If local altimeter setting not received, use Richmond Intl altimeter setting and increase all DAs 37 feet and all MDAs 40 feet. Baro-VNAV NA when using Richmond Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 34 NA at night.

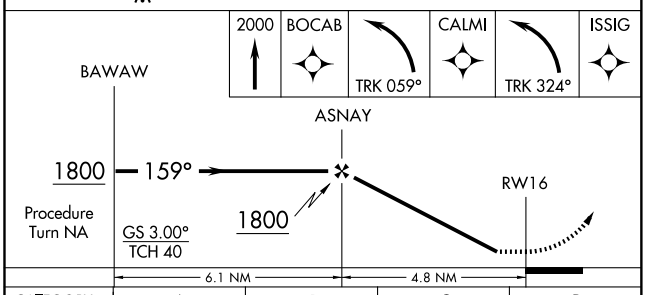
MISSED APPROACH: Climb to 2000 direct BOCAB and left turn via 059° track to CALMI and left turn via 324° track to ISSIG and hold.

ASOS	POTOMAC APP CON	CLNC DEL	UNICOM
119.025	134.7 307.2	125.4	122.7 (CTAF) L





REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	535-1¼ 328 (400-1¼)			
LNAV/VNAV DA	564-1¼ 357 (400-1¼)			
LNAV MDA	680-1 473 (500-1)		680-1¼ 473 (500-1¼)	680-1½ 473 (500-1½)
CIRCLING	680-1 473 (500-1)	700-1 493 (500-1)	700-1½ 493 (500-1½)	760-2 553 (600-2)

VORTAC RIC 114.1 Chan 88	APP CRS 165°	Rwy ldg 5402 TDZE 207 Apt Elev 207

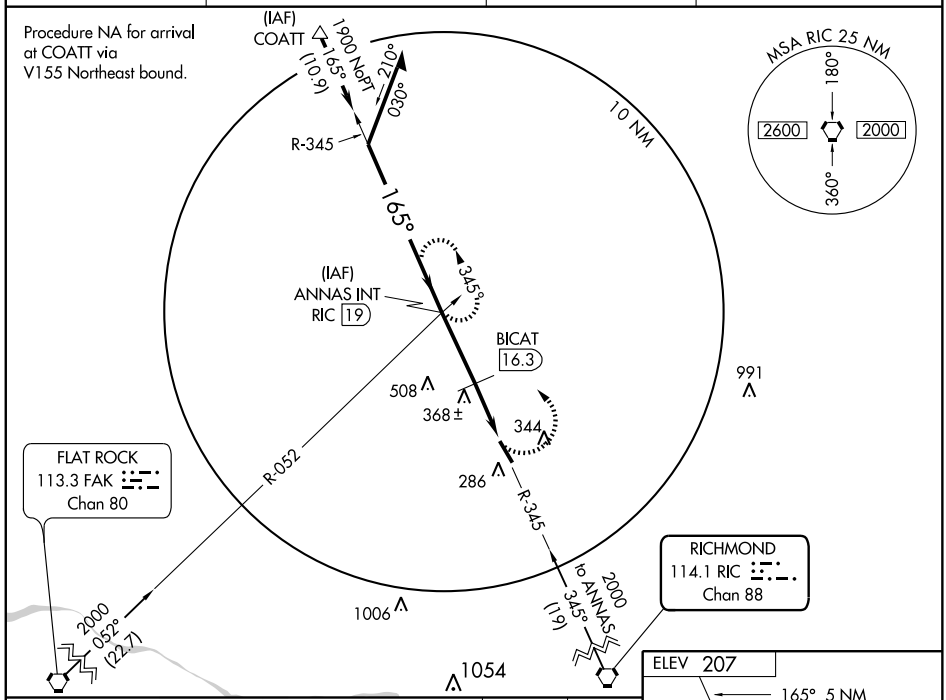
VOR RWY 16

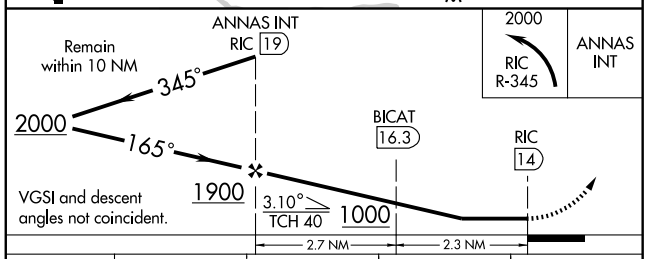
RICHMOND/ASHLAND/ HANOVER COUNTY MUNI (OFP)

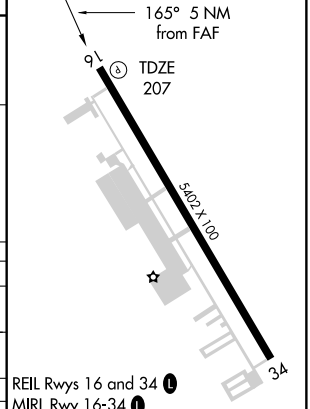
When local altimeter setting not received, use Richmond Intl altimeter setting and increase all MDA 40 feet. Circling Rwy 34 NA at night. Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 2000 via RIC R-345 to ANNAS INT/19 DME and hold.

ASOS	POTOMAC APP CON	CLNC DEL	UNICOM
119.025	134.7 307.2	125.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-16	1000 - 1 795 (800-1)	1000 - 1¼ 795 (800-1¼)	1000 - 2¼ 795 (800-2¼)	1000 - 2½ 795 (800-2½)
CIRCLING	1000 - 1 795 (800-1)	1000 - 1¼ 795 (800-1¼)	1000 - 2¼ 795 (800-2¼)	1000 - 2½ 795 (800-2½)
BICAT FIX MINIMUMS				
S-16	680 - 1 475 (500-1)		680 - 1¼ 475 (500-1¼)	680 - 1½ 475 (500-1½)
CIRCLING	680 - 1 475 (500-1)		680 - 1½ 475 (500-1½)	760 - 2 555 (600-2)

FAF to MAP 5 NM

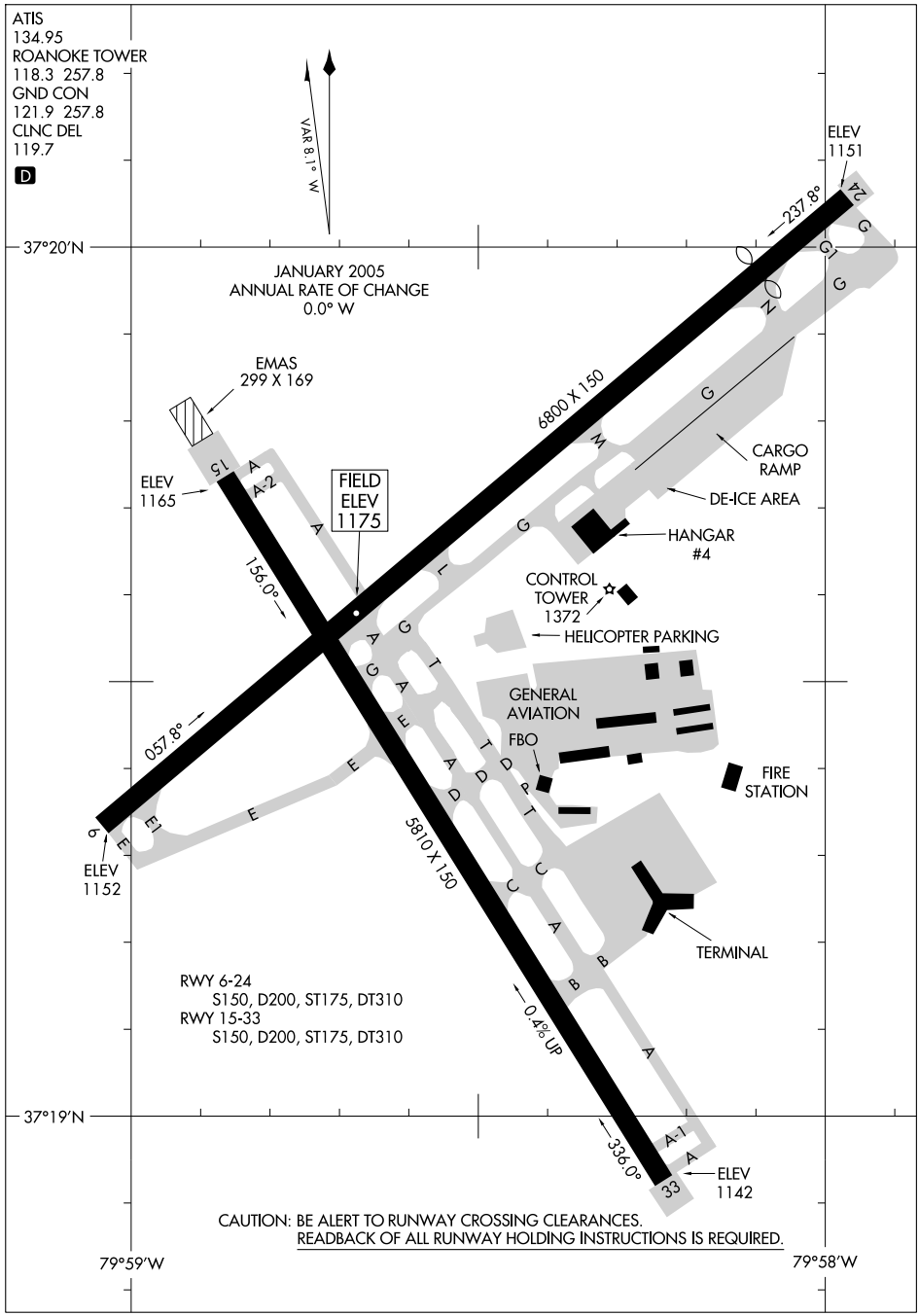
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NE-3, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-349 (FAA)

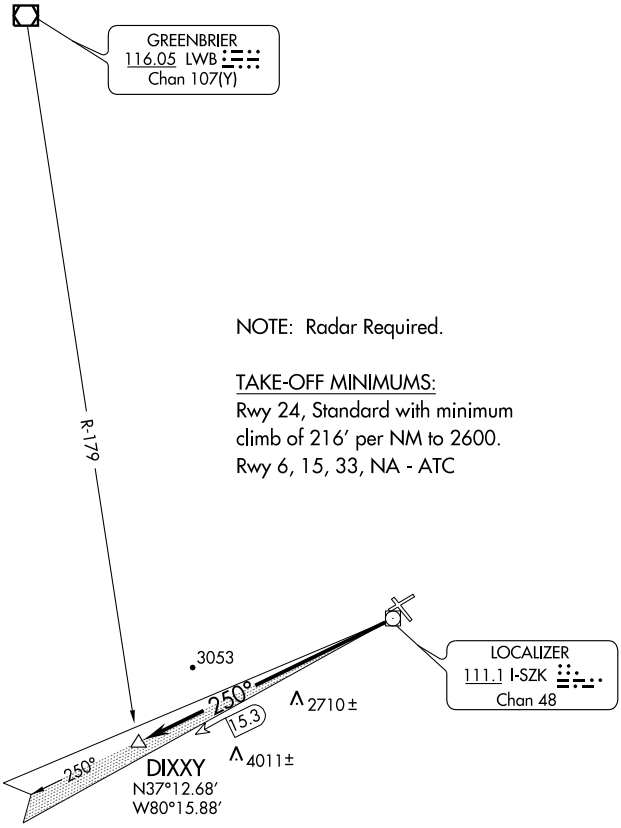
ROANOKE RGNL/WOODRUM FIELD (ROA)
ROANOKE, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

DIXXY FIVE DEPARTURE

ROANOKE CLINC DEL
119.7
ROANOKE GND CON
121.9
ROANOKE DEP CON
118.15



NOTE: Radar Required.

TAKE-OFF MINIMUMS:
Rwy 24, Standard with minimum climb of 216′ per NM to 2600.
Rwy 6, 15, 33, NA - ATC

TAKE-OFF OBSTACLE NOTES:
Rwy 24: Bush 86′ from DER, 385′ left of centerline, 4′ AGL/1163′ MSL.
Tree 150′ from DER, 415′ right of centerline, 60′ AGL/1171′ MSL.
Tree 737′ from DER, 454′ right of centerline, 60′ AGL/1179′ MSL.
Tree 1164′ from DER, 726′ right of centerline, 60′ AGL/1206′ MSL.

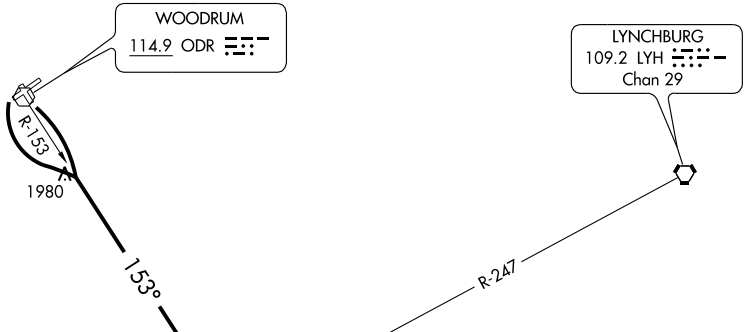
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb west on I-SZK LDA Localizer course to 4200, to DIXXY INT/I-SZK 15.3 DME. Expect radar vectors to filed/assigned route.

HOKEE ONE DEPARTURE

ROANOKE CLINC DEL
119.7
ROANOKE GND CON
121.9
ROANOKE DEP CON
118.15

TAKE-OFF OBSTACLES:
Rwy 15: Tree 1.2 NM from DER, 2,122′ left of centerline, 60′ AGL/1321′ MSL.
Rwy 24: Bush 86′ from DER, 385′ left of centerline, 4′ AGL/1163 MSL.
Tree 150′ from DER, 415′ right of centerline, 60′ AGL/1171′ MSL.
Tree 737′ from DER, 454′ right of centerline, 60′ AGL/1179′ MSL.
Tree 1164′ from DER, 726′ right of centerline, 60′ AGL/1206′ MSL.



TAKE-OFF MINIMUMS:
Rwy 15, STANDARD with minimum climb of 260′ per NM to 2300′
Rwy 24, STANDARD
Rwy 6, 33, NA - Obstacles

DEPARTURE ROUTE DESCRIPTION

RUNWAY 15: Climbing right turn to 5000 via ODR R-153 to HOKEE Int.
RUNWAY 24: Climbing left turn within 2 NM to 5000 to intercept ODR R-153 to HOKEE Int.
Expect radar vectors to filed/assigned route.

LOC I-ROA	APP CRS	Rwy ldg	5810
109.7	334°	TDZE	1159
		Apt Elev	1175

ILS or LOC RWY 33

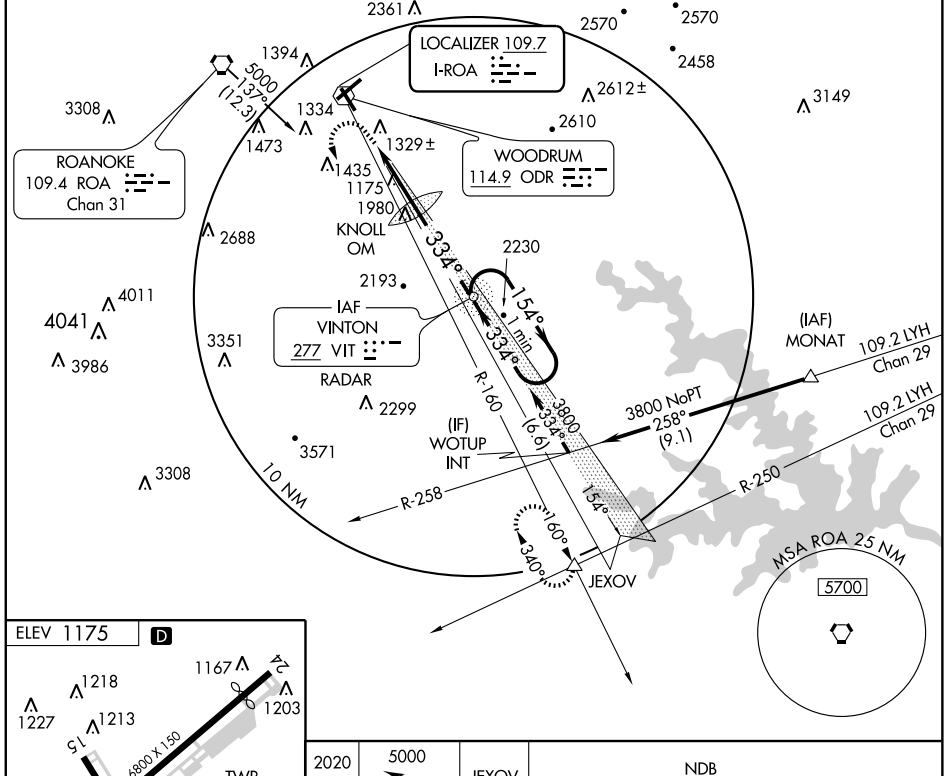
ROANOKE RGNL/WOODRUM FIELD (ROA)

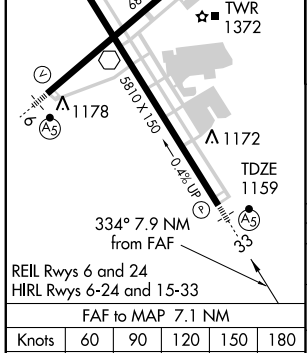
Circling to Rwy 15 NA. Circling NA NW of Rwy 6/24.
ADF or Radar required for S-LOC 33 minimums.
For inoperative MALSR, increase S-ILS 33
Cats A/B/C visibility to 2 miles, and Cat D to 2¼.

MALSR

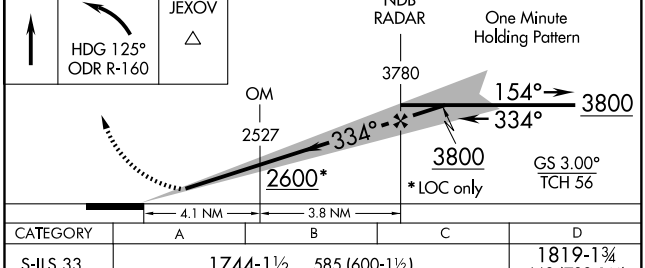
MISSED APPROACH: Climb to 2020 then climbing left turn to 5000 via heading 125° and ODR R-160 to JEXOV INT and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7





FAF to MAP 7.1 NM					
Knots	60	90	120	150	180
Min:Sec	7:06	4:44	3:33	2:50	2:22



CATEGORY	A	B	C	D
S-ILS 33	1744-1½ 585 (600-1½)			1819-1¾ 660 (700-1¾)
S-LOC 33	1940-½ 781 (800-½)	1940-¾ 781 (800-¾)	1940-1¾ 781 (800-1¾)	1940-2 781 (800-2)
CIRCLING	1940-1 765 (800-1)	1940-1¼ 765 (800-1¼)	1940-2¼ 765 (800-2¼)	1940-2½ 765 (800-2½)

NE-3, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-SZK	APP CRS	Rwy ldg 6800
111.1	070°	TDZE 1175
Chan 48		Apt Elev 1175

LDA RWY 6

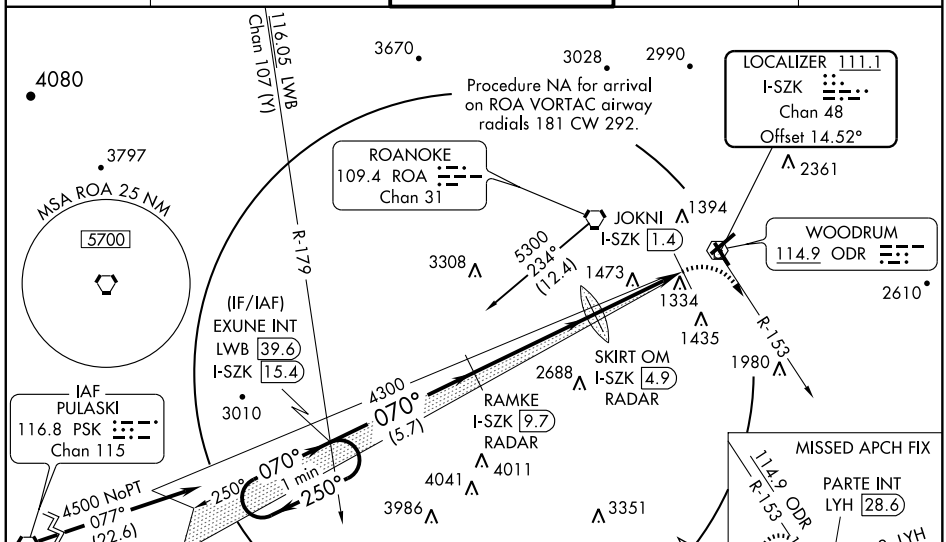
ROANOKE RGNL/WOODRUM FIELD (ROA)

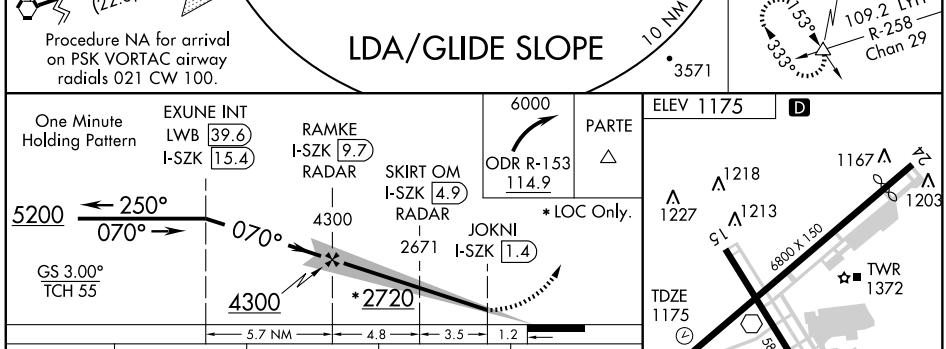
Circling NA NW of Rwy 6-24. Circling NA to Rwy 15. RADAR or DME REQUIRED. Inoperative table does not apply to S-LDA-6. SKIRT MINIMUMS: For inoperative MALSR increase S-LDA-6 Cats A and B to 1½ and Cat C visibility to 1¾. When VGSI inop, straight-in/circling Rwy 6 procedure NA at night.

MALSR (A5)

MISSED APPROACH: Climbing right turn to 6000 via ODR R-153 to PARTE Int/LYH 28.6 DME and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7





CATEGORY	A	B	C	D
S-LDA/GS 6	1580-1 405 (500-1)			
S-LDA 6	2720-1½ 1545 (1600-1½)		2720-3 1545 (1600-3)	
CIRCLING	2720-1½ 1545 (1600-1½)		2720-3 1545 (1600-3)	
SKIRT OM/DME/RADAR				
S-LDA 6	1780-1 605 (700-1)		1780-1¼ 605 (700-1¼)	1780-1½ 605 (700-1½)
CIRCLING	1780-1½ 605 (700-1½)		1780-1¾ 605 (700-1¾)	1780-2 605 (700-2)

FAF to MAP 8.3 NM					
Knots	60	90	120	150	180
Min:Sec	8:18	5:32	4:09	3:19	2:46

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	6800
070°	TDZE	1176
	Apt Elev	1176

RNAV (GPS) RWY 6

ROANOKE RGNL/WOODRUM FIELD (ROA)

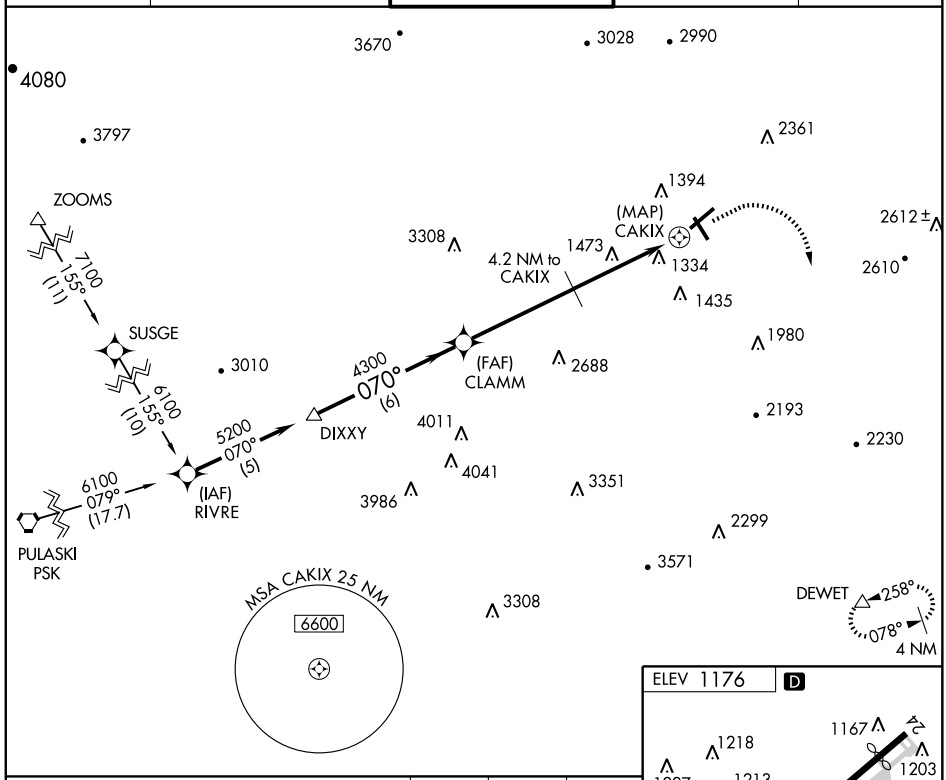
NA

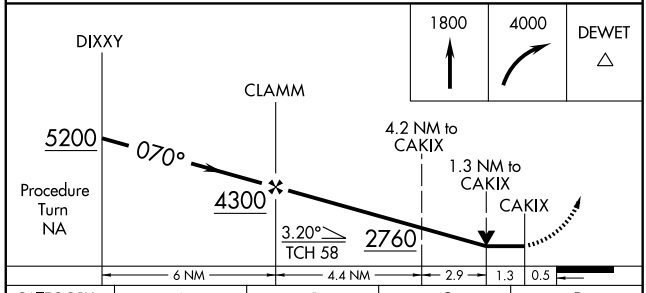
Circling to Rwy 15 is NA. Circling NA northwest Rwy 6-24. For inoperative MALSR, increase LNAV MDA Cat A and B visibility to 1 mile. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

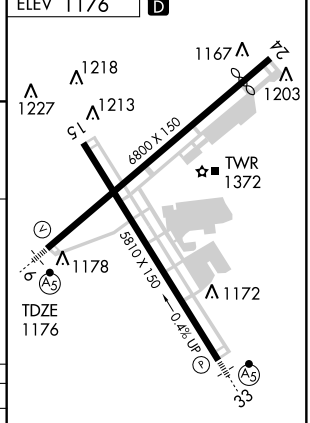
MALSR

MISSED APPROACH: Climb to 1800, then climbing right turn to 4000 direct DEWET INT and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7







CATEGORY	A	B	C	D
LNAV MDA	1780-¾ 604 (700-¾)		1780-1¼ 604 (700-1¼)	1780-2 604 (700-2)
CIRCLING	1780-1 604 (700-1)		1780-1¾ 604 (700-1¾)	1840-2 664 (700-2)

REIL Rwys 6 and 24
HIRL Rwys 6-24 and 15-33

NE-3. 14 JAN 2010 to 11 FEB 2010

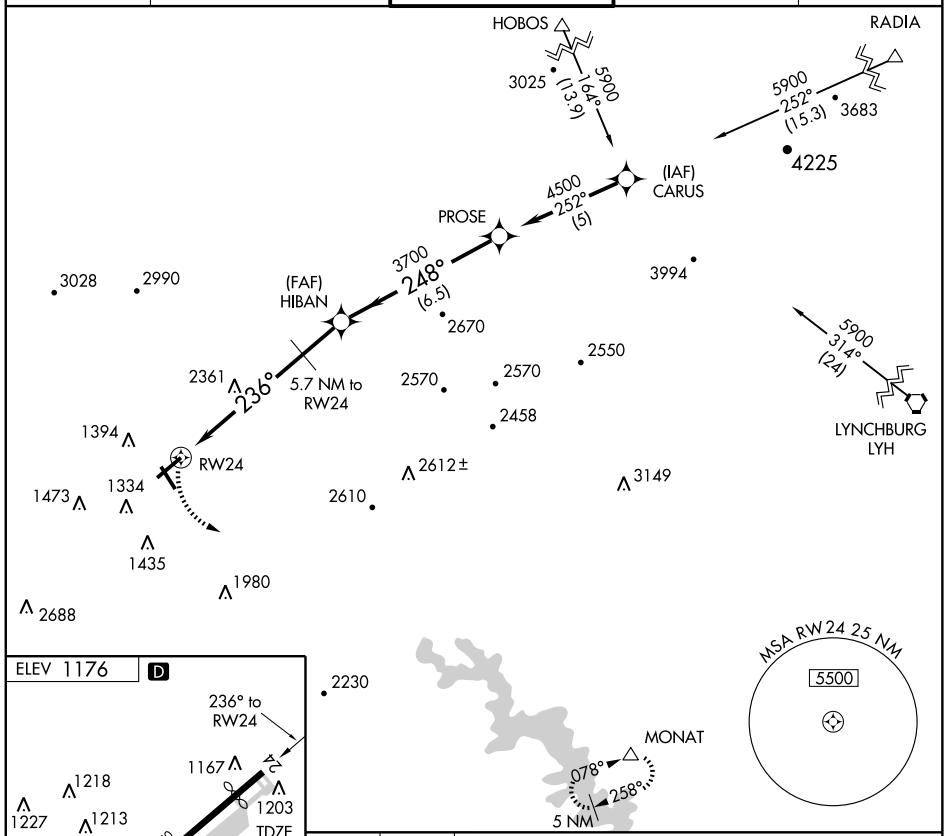
APP CRS	Rwy ldg	6010
236°	TDZE	1170
	Apt Elev	1176

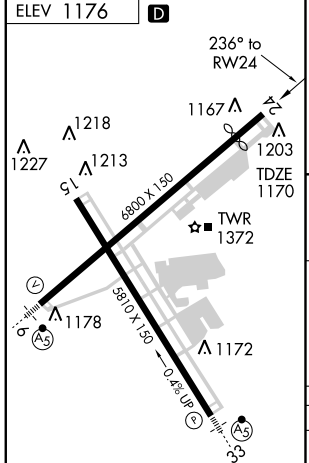
RNAV (GPS) RWY 24
ROANOKE RGNL/WOODRUM FIELD (ROA)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Circling NA northwest of Rwy 6-24. Circling to Rwy 15 is NA.

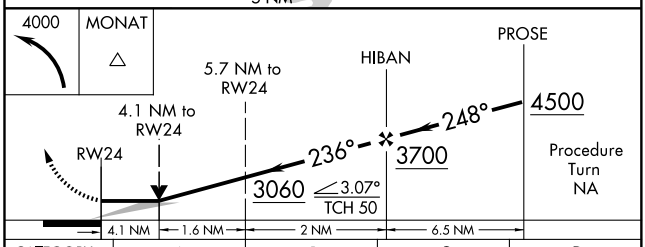
MISSED APPROACH: Climbing left turn to 4000 direct MONAT WP and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7





REIL Rwys 6 and 24
HIRL Rwys 6-24 and 15-33



CATEGORY	A	B	C	D
LNAV MDA	2580-1¼ 1410 (1500-1¼)	2580-1½ 1410 (1500-1½)	2580-3 1410 (1500-3)	
CIRCLING	2580-1¼ 1404 (1500-1¼)	2580-1½ 1404 (1500-1½)	2580-3 1404 (1500-3)	

APP CRS	Rwy ldg	5800
334°	TDZE	1160
	Apt Elev	1176

RNAV (GPS) RWY 33

ROANOKE RGNL/WOODRUM FIELD (ROA)

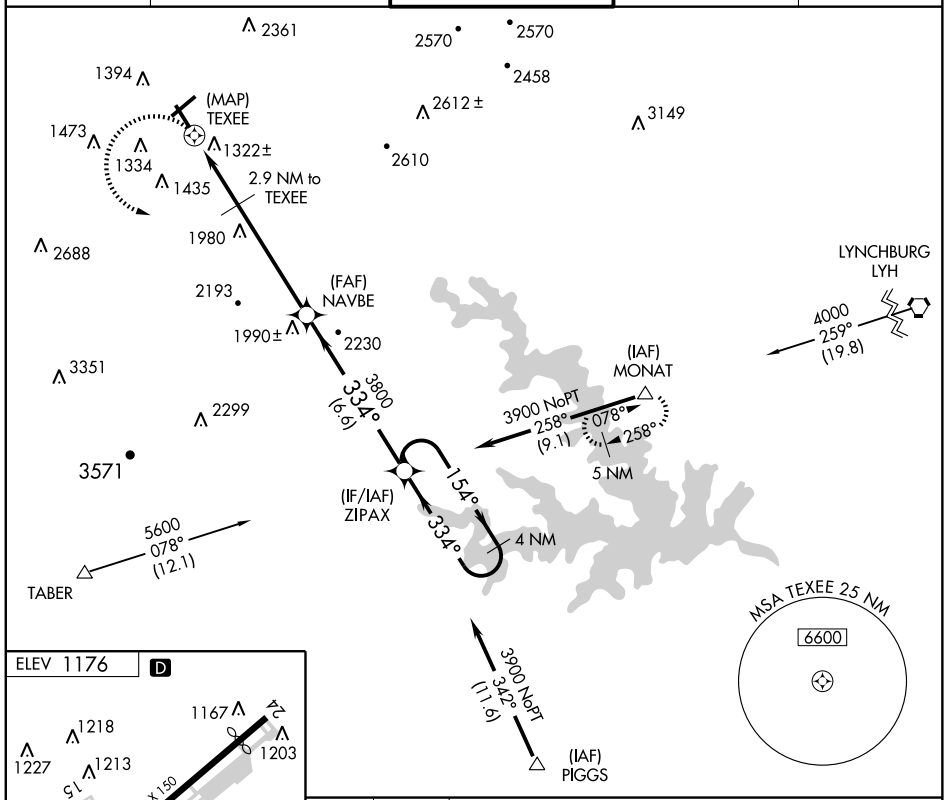
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LNAV MDA Cat D visibility to 1¼ miles. Circling NA NW of Rwy 6-24. Circling to Rwy 15 NA.

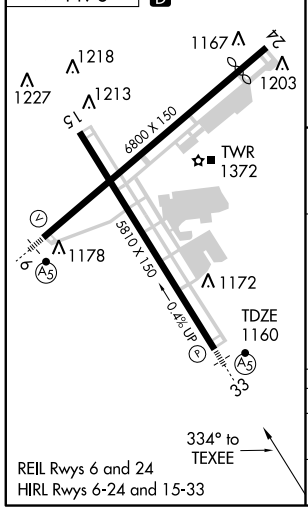
NA

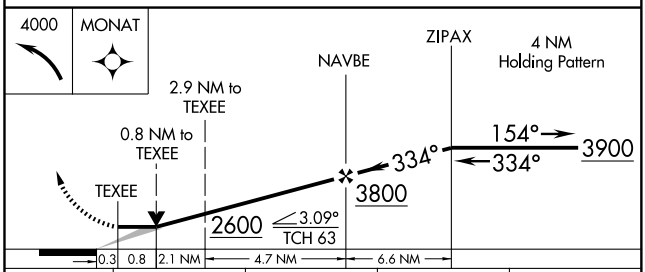
MALSR

MISSED APPROACH: Climbing left turn to 4000 direct MONAT WP and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7







CATEGORY	A	B	C	D
LNAV MDA	1580-½ 420 (500-½)		1580-¾ 420 (500-¾)	1580-1 420 (500-1)
CIRCLING	1640-1 464 (500-1)		1700-1½ 524 (600-1½)	1840-2 664 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VOR ODR	APP CRS	Rwy ldg	N/A
114.9	234°	TDZE	N/A
		Apt Elev	1175

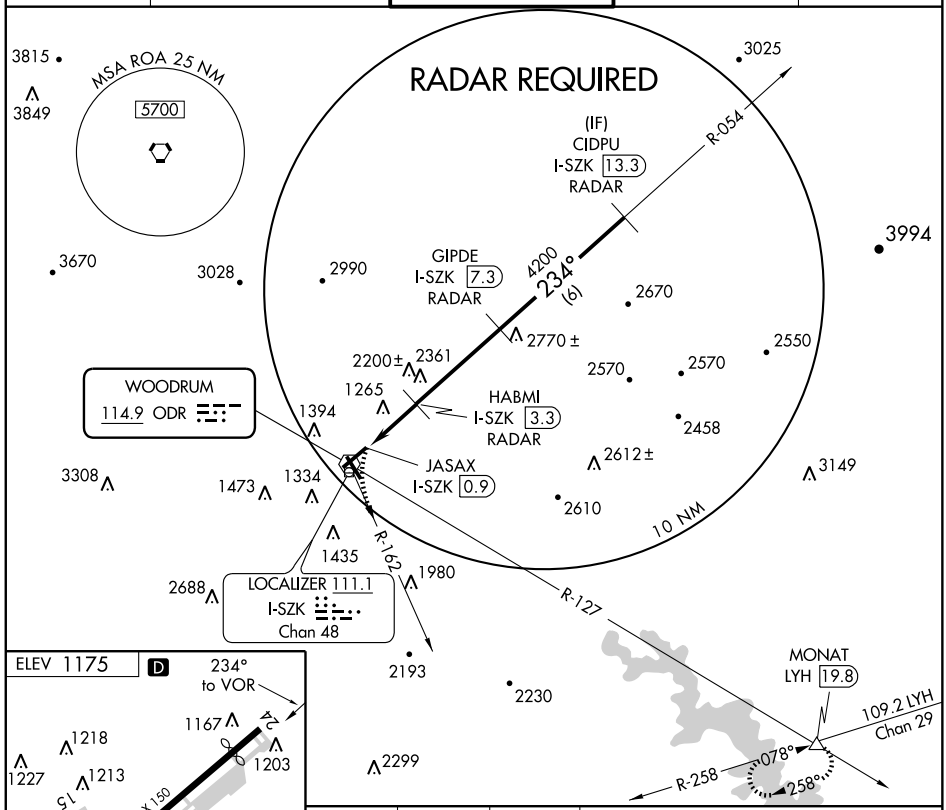
VOR/DME-A

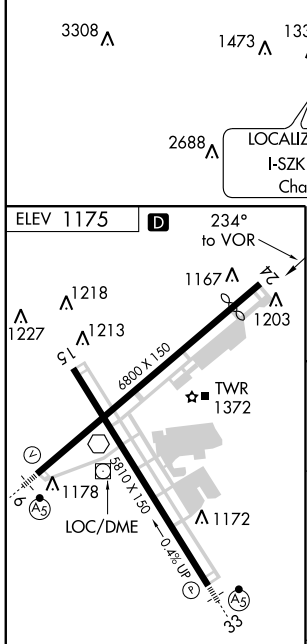
ROANOKE RGNL/WOODRUM FIELD (ROA)

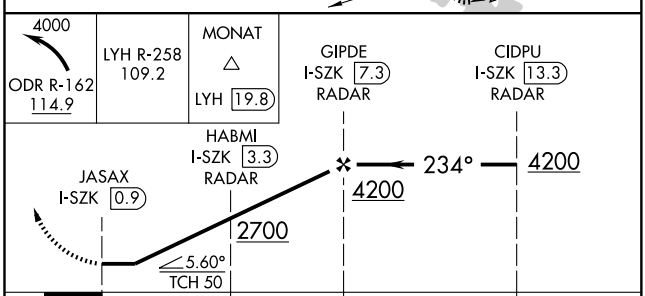
Simultaneous reception of ODR VOR and I-SZK DME required. DME from I-SZK LDA.
Circling NA northwest of Rwy 6-24. Circling to Rwy 15 NA.

MISSED APPROACH: Climbing left turn to 4000 via ODR VOR R-162 and LYH VORTAC R-258 to MONAT/LYH 19.8 DME and hold.

ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7







CATEGORY	A	B	C	D
CIRCLING	1760-1 585 (600-1)		1760-1½ 585 (600-1½)	1780-2 605 (700-2)

REIL Rwys 6 and 24
HIRL Rwys 6-24 and 15-33

VOR ODR	APP CRS	Rwy ldg	5810
114.9	333°	TDZE	1159
		Apt Elev	1175

VOR/NDB RWY 33

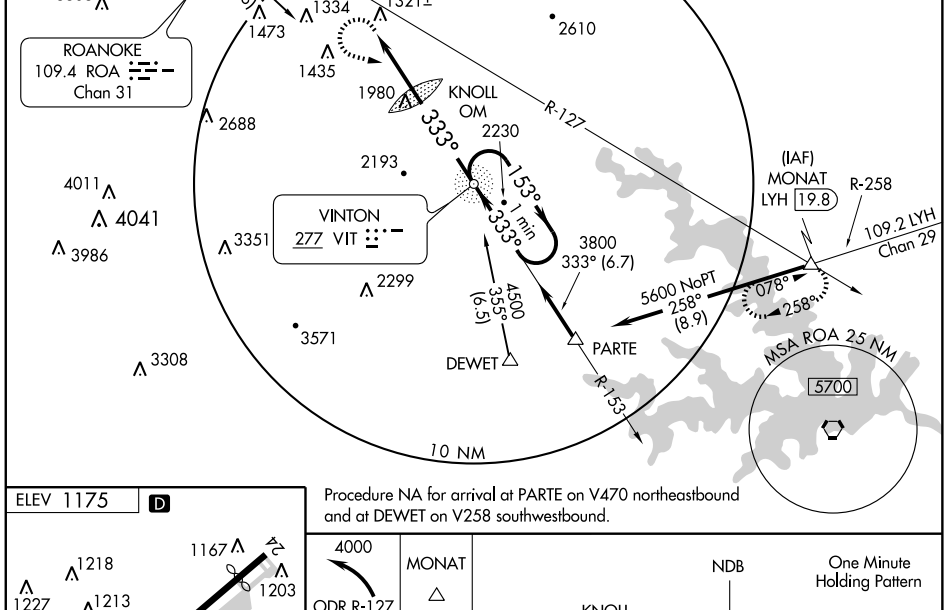
ROANOKE RGNL/WOODRUM FIELD (ROA)

Circling NA Northwest of Rwy 6-24.
Circling to Rwy 15 NA.

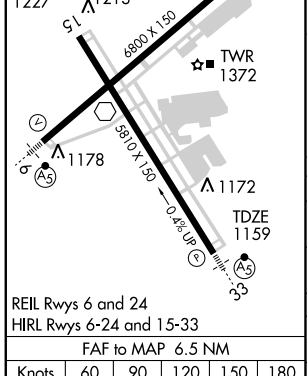
MALSR

MISSED APPROACH: Climbing left turn to 4000 via ODR R-127 to MONAT INT/LYH 19.8 and hold.

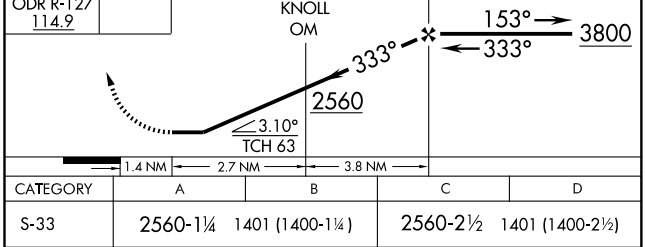
ATIS	ROANOKE APP CON	ROANOKE TOWER	GND CON	CLNC DEL
134.95	126.9 339.8	118.3 257.8	121.9 257.8	119.7



Procedure NA for arrival at PARTE on V470 northeastbound and at DEWET on V258 southwestbound.



FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10



CATEGORY	A	B	C	D
S-33	2560-1¼ 1401 (1400-1¼)		2560-2½ 1401 (1400-2½)	
CIRCLING	2560-1¾ 1385 (1400-1¾)		2560-3 1385 (1400-3)	
KNOLL OM MINIMA				
S-33	1700-1¼ 541 (600-1¼)			
CIRCLING	1700-1¾ 525 (600-1¾)			1780-2 605 (700-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	2135
006°	TDZE	30
	Apt Elev	30

GPS RWY 1

SALUDA/ HUMMEL FIELD (W75)

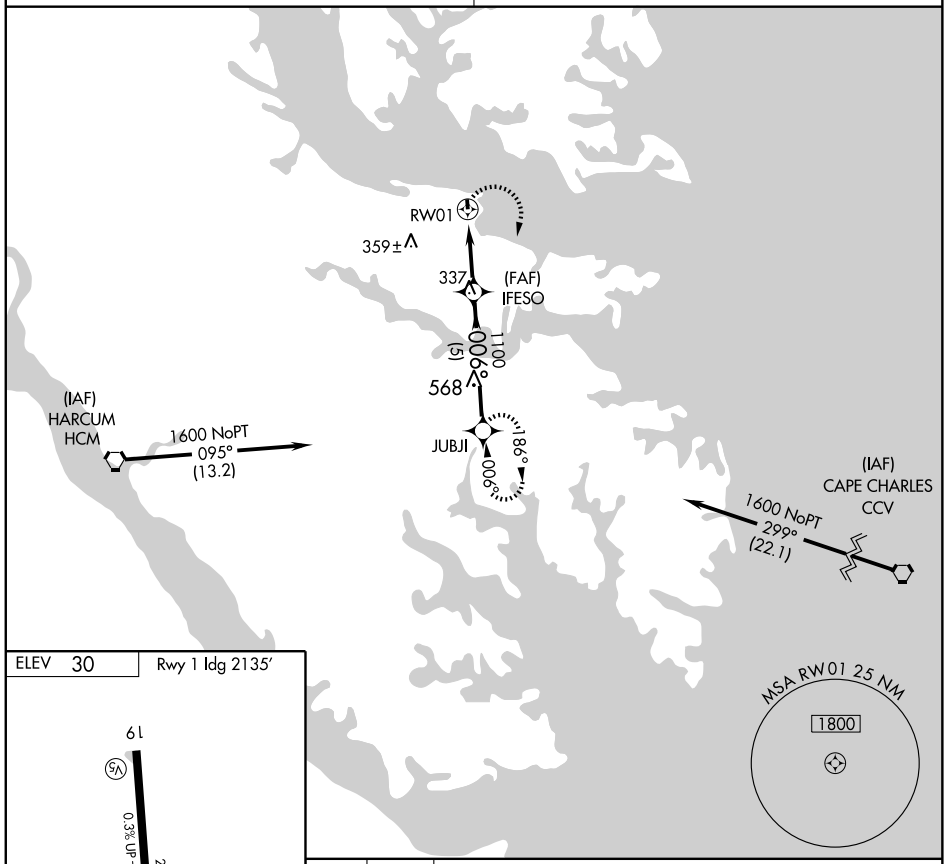
Use Newport News/Williamsburg Intl altimeter setting.
Circling NA at night to Rwy 19.

NA

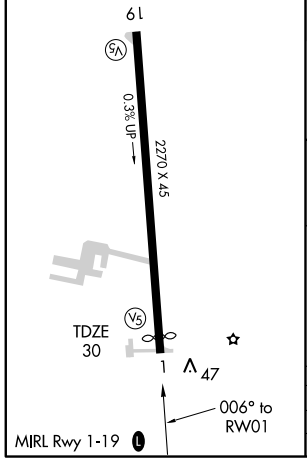
MISSED APPROACH: Climbing right turn to 1600 direct JUBJI WP and hold.

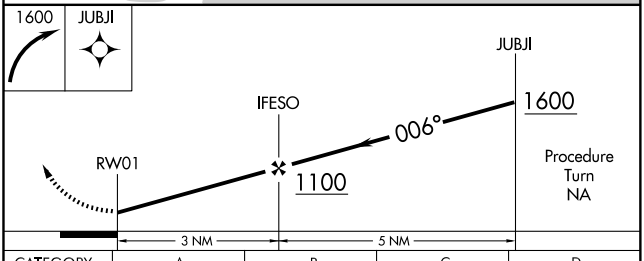
NORFOLK APP CON
126.05 370.925

UNICOM
123.0 (CTAF)



ELEV 30 | Rwy 1 ldg 2135′





CATEGORY	A	B	C	D
S-1	520-1 490 (500-1)		NA	
CIRCLING	520-1 490 (500-1)		NA	

NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS CH 77614 W01A	APP CRS 005°	Rwy ldg 4003 TDZE 410 Apt Elev 420

RNAV (GPS) RWY 1

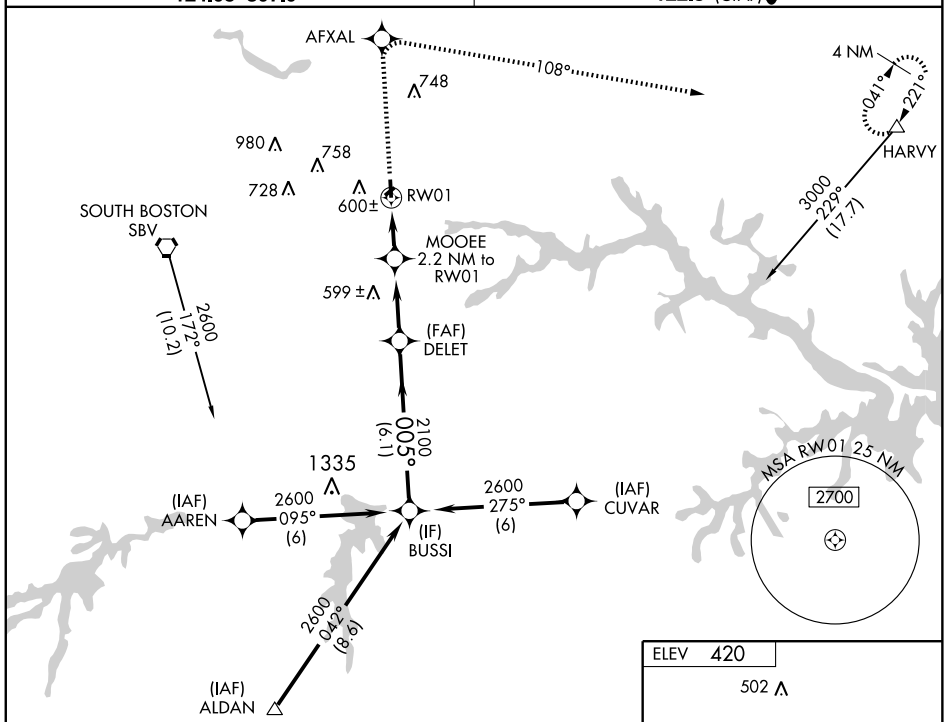
SOUTH BOSTON / WILLIAM M. TUCK (W78)

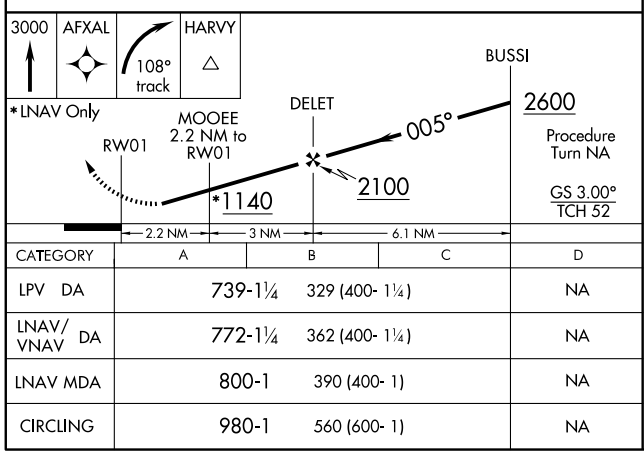
NA

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Danville Regional altimeter setting; when not received, use Lynchburg Rgnl/Preston Glenn Field altimeter setting and increase all DA 87 feet, all MDA 100 feet, increase LPV all Cats and LNAV Cat C and circling Cat C visibilities ¼ mile, increase LNAV/VNAV all Cats visibility ½ mile. Baro-VNAV NA.

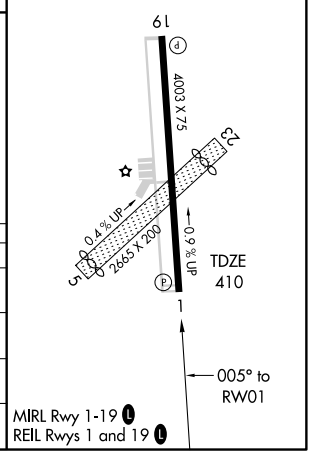
MISSED APPROACH: Climb to 3000 direct AFXAL and right turn via track 108° to HARVY and hold.

WASHINGTON CENTER	UNICOM
124.05 307.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	739-1¼	329 (400- 1¼)		NA
LNAV/VNAV DA	772-1¼	362 (400- 1¼)		NA
LNAV MDA	800-1	390 (400- 1)		NA
CIRCLING	980-1	560 (600- 1)		NA



APP CRS	Rwy ldg	4003
185°	TDZE	420
	Apt Elev	420

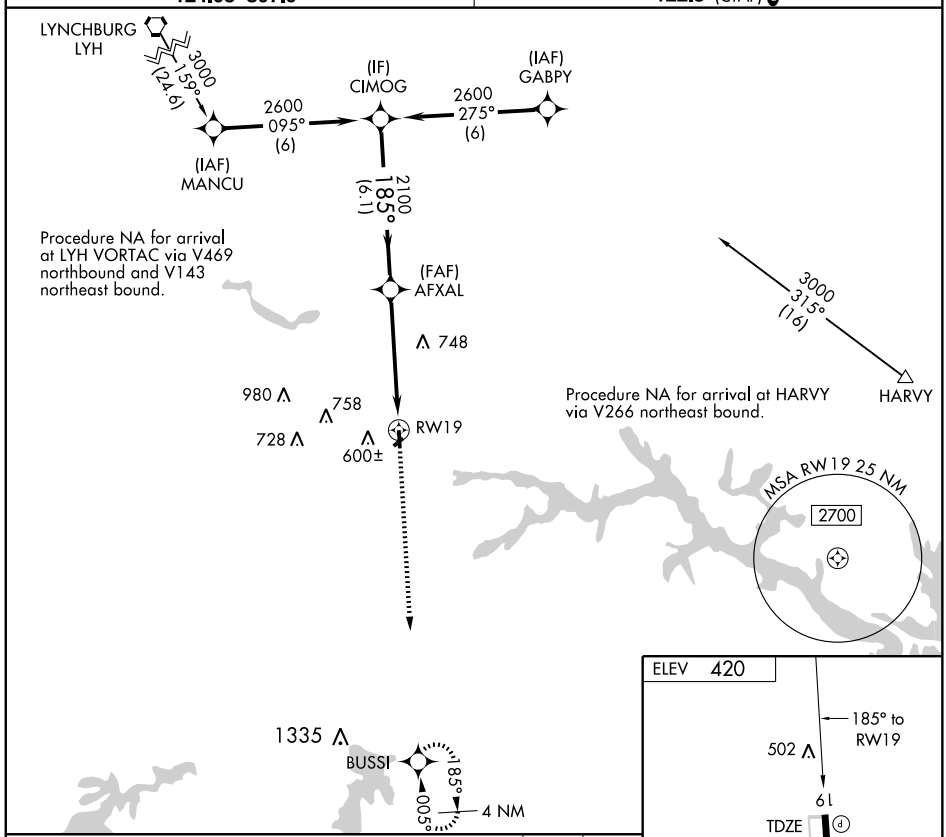
RNAV (GPS) RWY 19

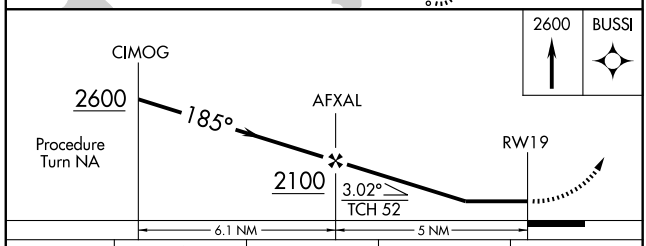
SOUTH BOSTON / WILLIAM M. TUCK (W78)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
Use Danville Regional altimeter setting; when not received, use Lynchburg Rgnl/Preston Glenn Field altimeter setting and increase all MDA 100 feet, increase LNAV and circling Cat C visibility ½ mile.

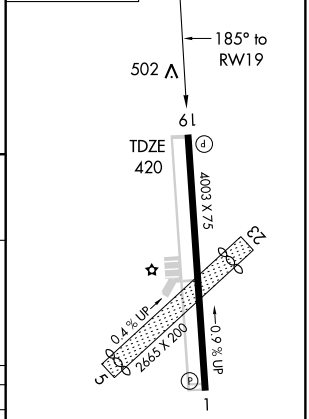
MISSED APPROACH: Climb to 2600 direct BUSSI and hold.

WASHINGTON CENTER	UNICOM
124.05 307.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1020-1	600 (600- 1)	1020-1½ 600 (600- 1½)	NA
CIRCLING	1020-1	600 (600- 1)	1020-1½ 600 (600- 1½)	NA



MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L

SOUTH BOSTON, VIRGINIA

AL-5112 (FAA)

VOR SBV 110.4 Chan 41	APP CRS 081°	Rwy ldg N/A TDZE N/A Apt Elev 420

VOR-A

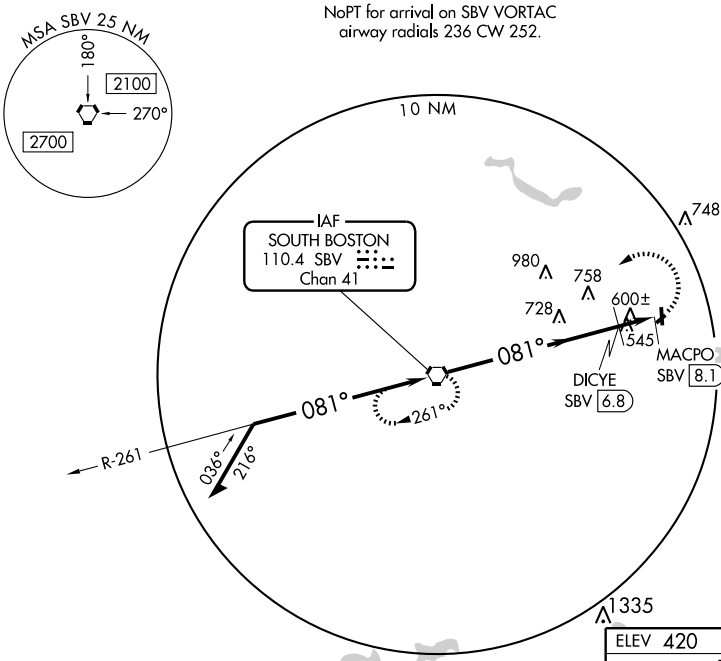
SOUTH BOSTON / WILLIAM M. TUCK (W78)

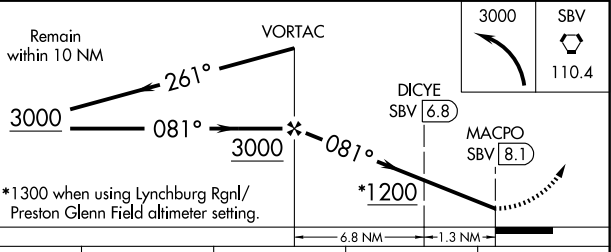
NA Use Danville Rgnl altimeter setting, when not received, use Lynchburg Rgnl/Preston Glenn Field altimeter setting and increase all MDA 100 feet, and increase all Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 direct SBV VORTAC and hold.

WASHINGTON CENTER	UNICOM
124.05 307.0	122.8 (CTAF) L

NoPT for arrival on SBV VORTAC airway radials 236 CW 252.

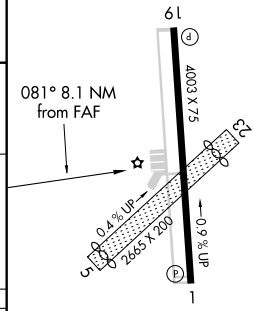




*1300 when using Lynchburg Rgnl/ Preston Glenn Field altimeter setting.

ELEV 420

502



MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L

CATEGORY	A	B	C	D
CIRCLING	1200-1 780 (800-1)	1200-1¼ 780 (800-1¼)	1200-2¼ 780 (800-2¼)	NA
DICYE DME MINIMUMS				
CIRCLING	960-1 540 (600-1)		960-1½ 540 (600-1½)	NA

FAF to MAP 8.1 NM					
Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5002
187°	TDZE	442
	Apt Elev	442

GPS RWY 19

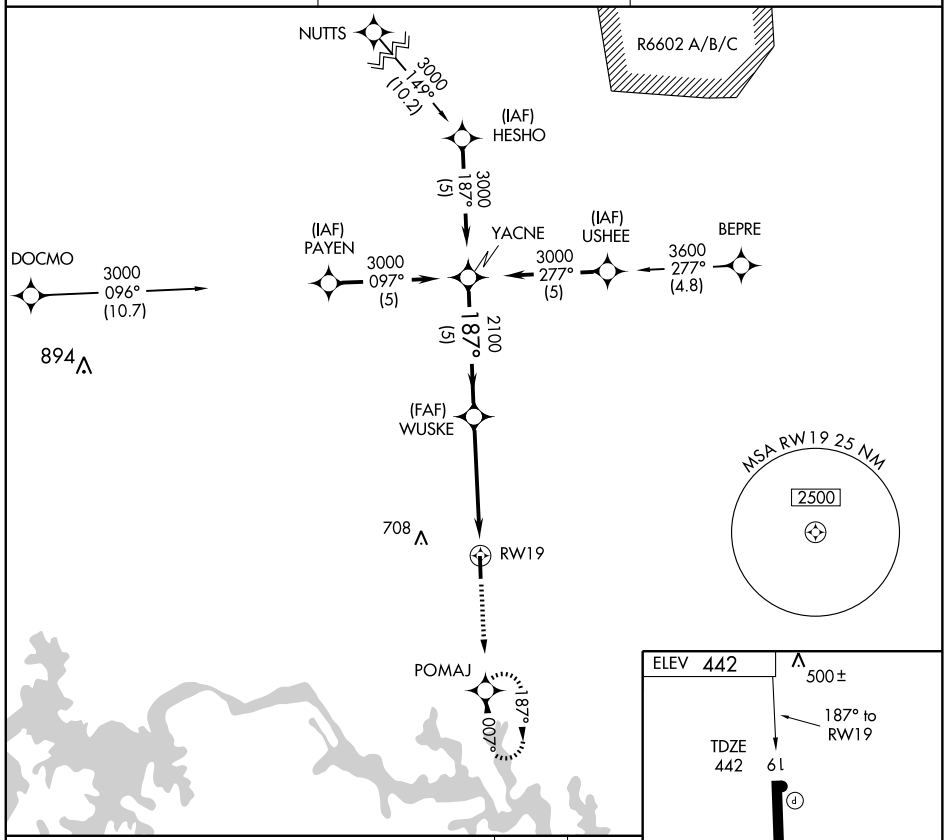
SOUTH HILL / MECKLENBURG-BRUNSWICK RGNL (AVC)

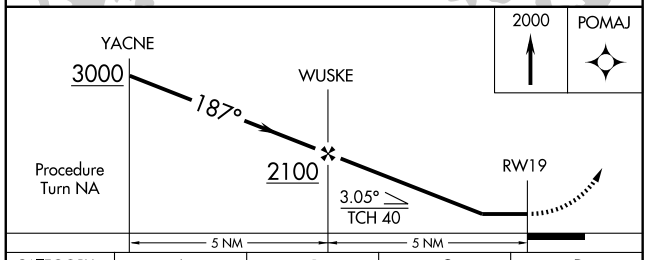
T

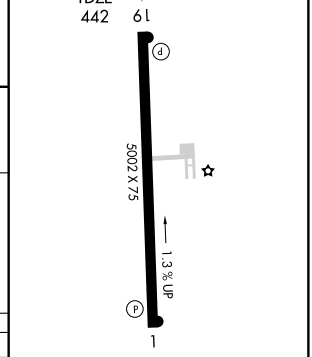
A NA

MISSED APPROACH: Climb to 2000 direct POMAJ WP and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
127.525	118.75 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-19	760-1 318 (400-1)			
CIRCLING	800-1 358 (400-1)	900-1 458 (500-1)	900-1½ 458 (500-1½)	1060-2 618 (700-2)

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L

NE-3. 14 JAN 2010 to 11 FEB 2010

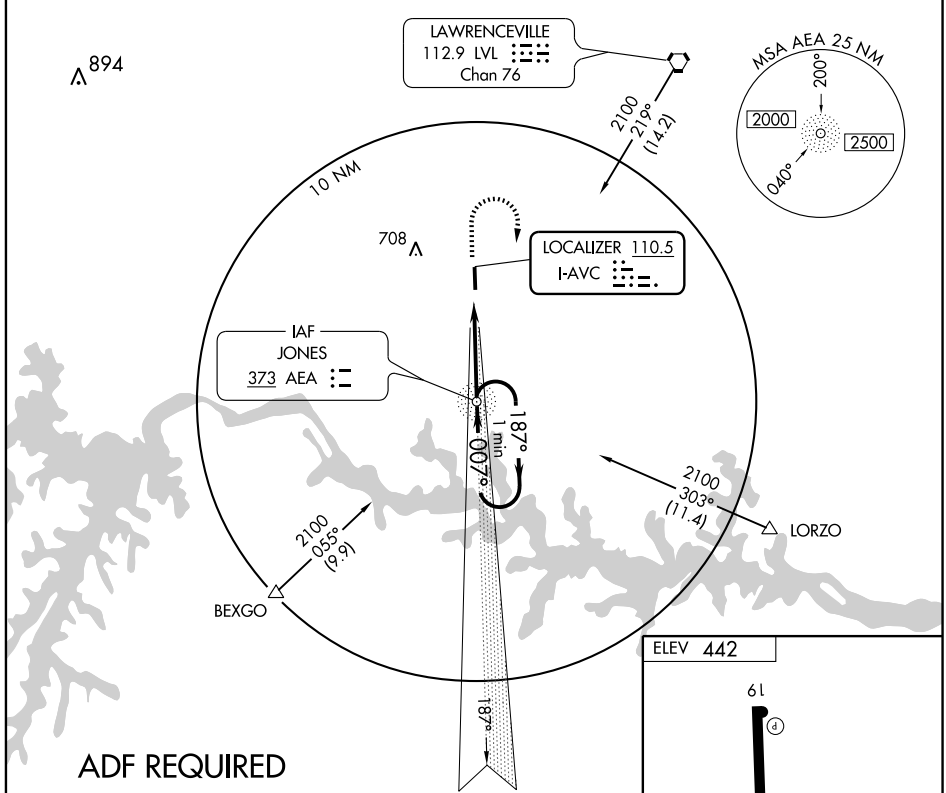
LOC I-AVC	APP CRS	Rwy ldg	5002
110.5	007°	TDZE	417
		Apt Elev	442

LOC RWY 1

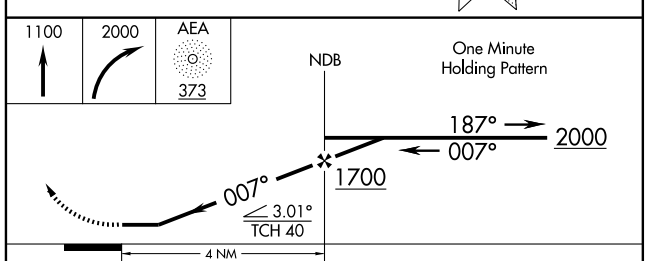
SOUTH HILL / MECKLENBURG-BRUNSWICK RGNL (AVC)

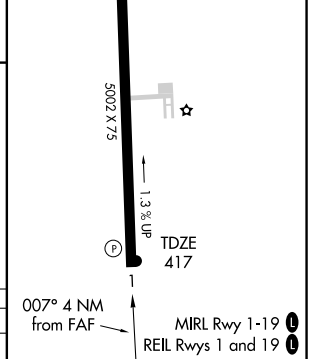
MISSED APPROACH: Climb to 1100 then climbing right turn to 2000 direct AEA NDB and hold.

AWOS-3	WASHINGTON CENTER	UNICOM
127.525	118.75 377.1	122.8 (CTAF) L



ADF REQUIRED





CATEGORY	A	B	C	D
S-1	800-1 383 (400-1)			800-1¼ 383 (400-1¼)
CIRCLING	800-1 358 (400-1)	900-1 458 (500-1)	900-1½ 458 (500-1½)	1060-2 618 (700-2)

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

NE-3. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RMN	APP CRS	Rwy ldg 5000
108.75	329°	TDZE 196
Chan 24 (Y)		Apt Elev 212

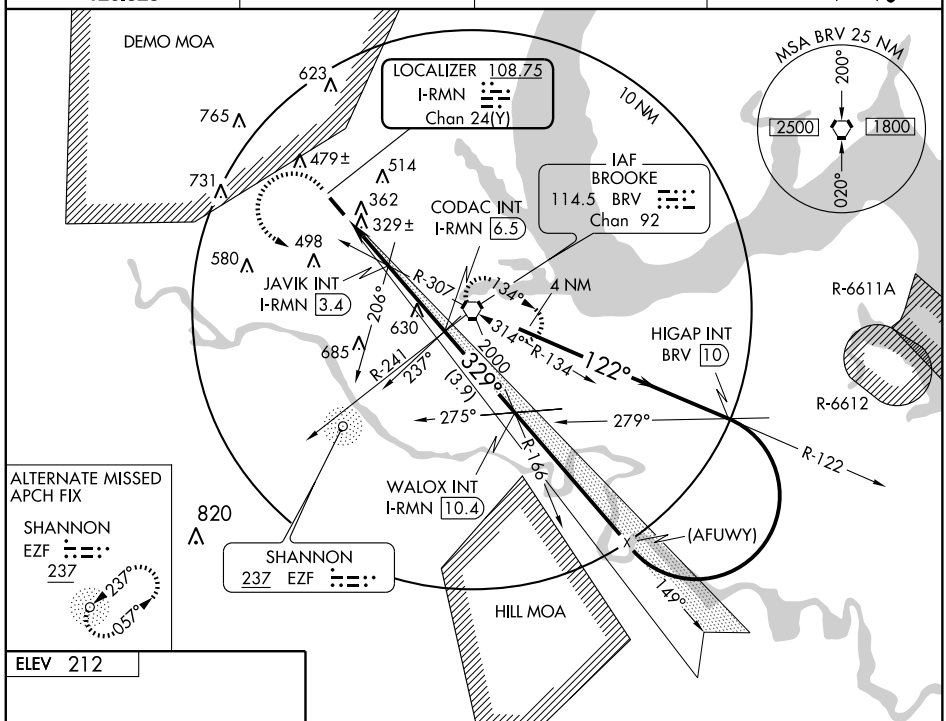
ILS or LOC RWY 33
STAFFORD RGNL (RMN)

If local altimeter setting not received, use Shannon, Fredericksburg, VA altimeter setting and increase all DH/MDAs 40 feet.
NA Inoperative table does not apply to S-ILS 33 and to S-LOC Cats B and C. DME or ADF required.

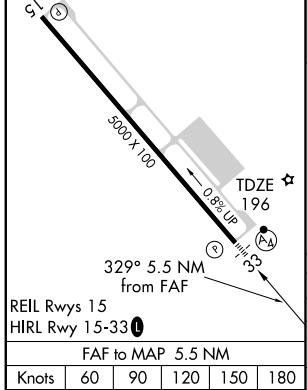
MALS

MISSED APPROACH: Climb to 600 then climbing left turn to 2000 direct BRV VORTAC and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
126.325	124.65 306.925	135.075	122.725 (CTAF)

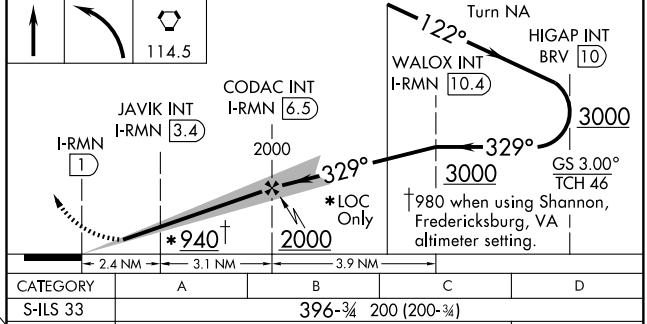


ELEV 212



REIL Rwys 15
HIRL Rwy 15-33

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-ILS 33	396-¾ 200 (200-¾)			
S-LOC 33	580-¾ 384 (400-¾)			580-1¼ 384 (400-1¼)
CIRCLING	720-1 508 (600-1)	740-1 528 (600-1)	840-1¾ 628 (700-1¾)	860-2 648 (700-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS CH 81805 W33A	APP CRS 329°	Rwy ldg 5000 TDZE 196 Apt Elev 212

RNAV (GPS) RWY 33
STAFFORD RGNL (RMN)

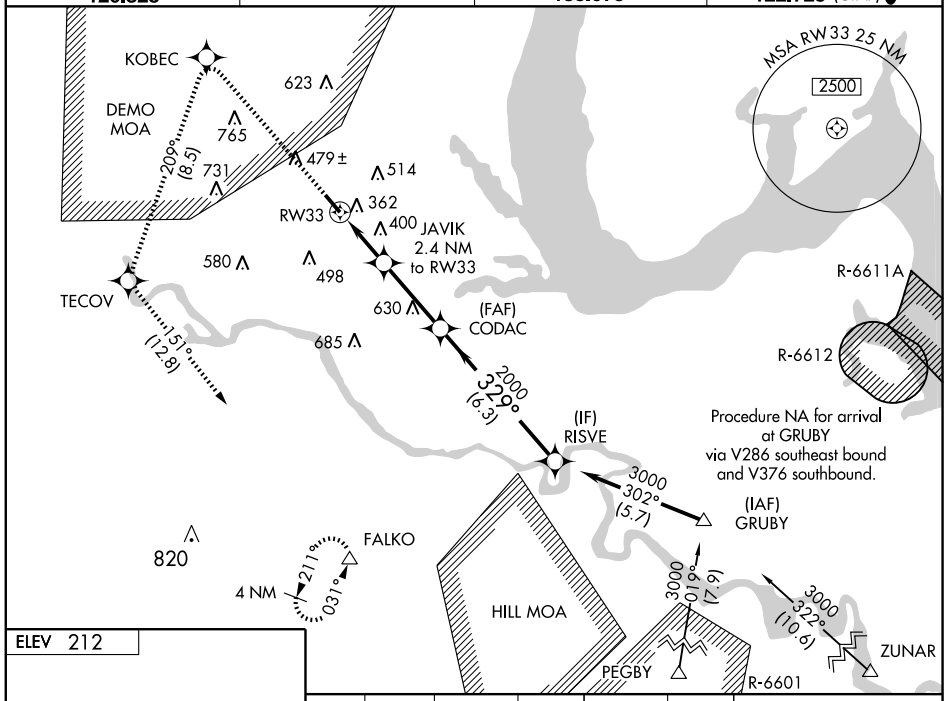
If local altimeter setting not received, use Shannon, Fredericksburg, VA altimeter setting and increase all DAs/MDAs 40 feet. Baro/VNAV NA below -15°C (5°F). VDP and Baro-VNAV NA when using Shannon, Fredericksburg, VA altimeter setting. Inoperative table does not apply to LNAV Cat C. DME/DME RNP-0.3 NA.

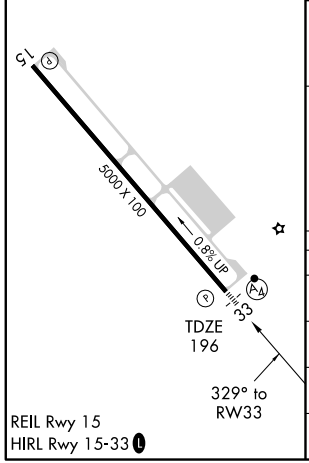
NA

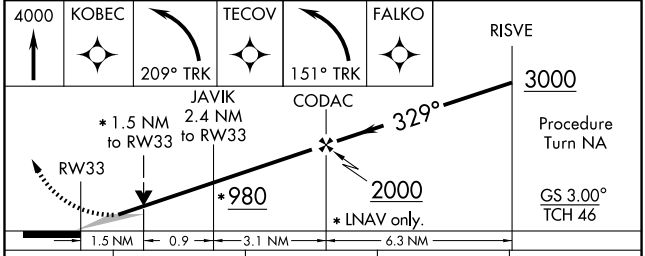
MALS

MISSED APPROACH: Climb to 4000 direct KOBEC and left turn via 209° track to TECOV and left turn via 151° track to FALKO and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
126.325	124.65 306.925	135.075	122.725 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	450-¾ 254 (300-¾)			450-1 254 (300-1)
LNAV/VNAV DA	460-¾ 264 (300-¾)			460-1 264 (300-1)
LNAV MDA	700-¾ 504 (500-¾)		700-1½ 504 (500-1½)	
CIRCLING	720-1 508 (600-1)	740-1 528 (600-1)	840-1¾ 628 (700-1¾)	880-2 668 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC BRV 114.5 Chan 92	APP CRS 314°	Rwy ldg 5000 TDZE 196 Apt Elev 212

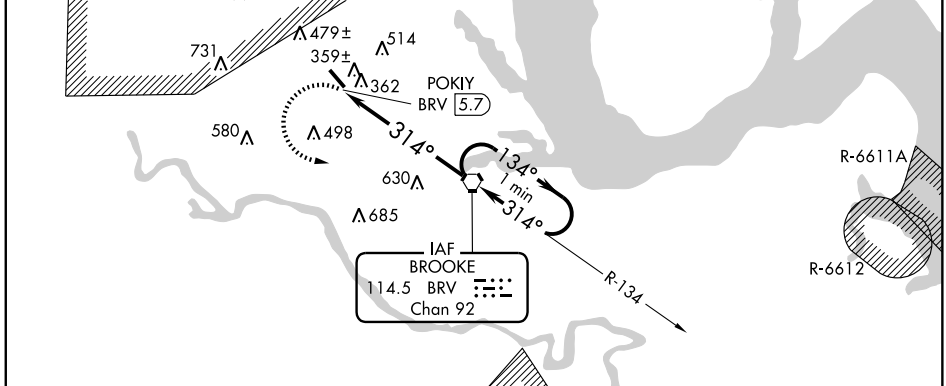
VOR RWY 33
STAFFORD RGNL (RMN)

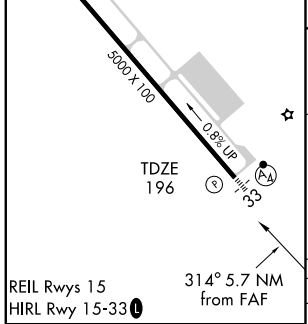
If local altimeter setting not received, use Shannon, Fredericksburg, VA altimeter setting and increase all MDAs 40 feet. VDP NA with Shannon, Fredericksburg, VA altimeter setting. Inoperative table does not apply to Cat C.

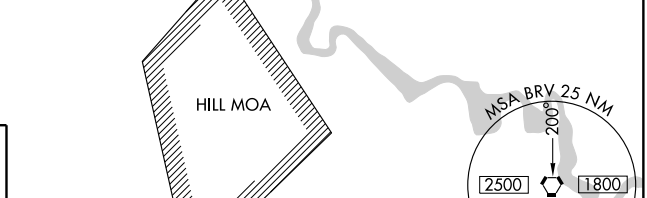
MALS

MISSED APPROACH: Climbing left turn to 2000 direct BRV VORTAC and hold.

AWOS-3	POTOMAC APP CON	GCO	UNICOM
126.325	124.65 306.925	135.075	122.725 (CTAF) L







FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

CATEGORY	A	B	C	D
S-33	740-¾ 544 (600-¾)		740-1½ 544 (600-1½)	740-1¾ 544 (600-1¾)
CIRCLING	740-1 528 (600-1)		840-1¾ 628 (700-1¾)	860-2 648 (700-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

LOC I-SHD	APP CRS	Rwy ldg	6002
109.5	047°	TDZE	1184
		Apt Elev	1201

AL-5369 (FAA)

ILS or LOC RWY 5

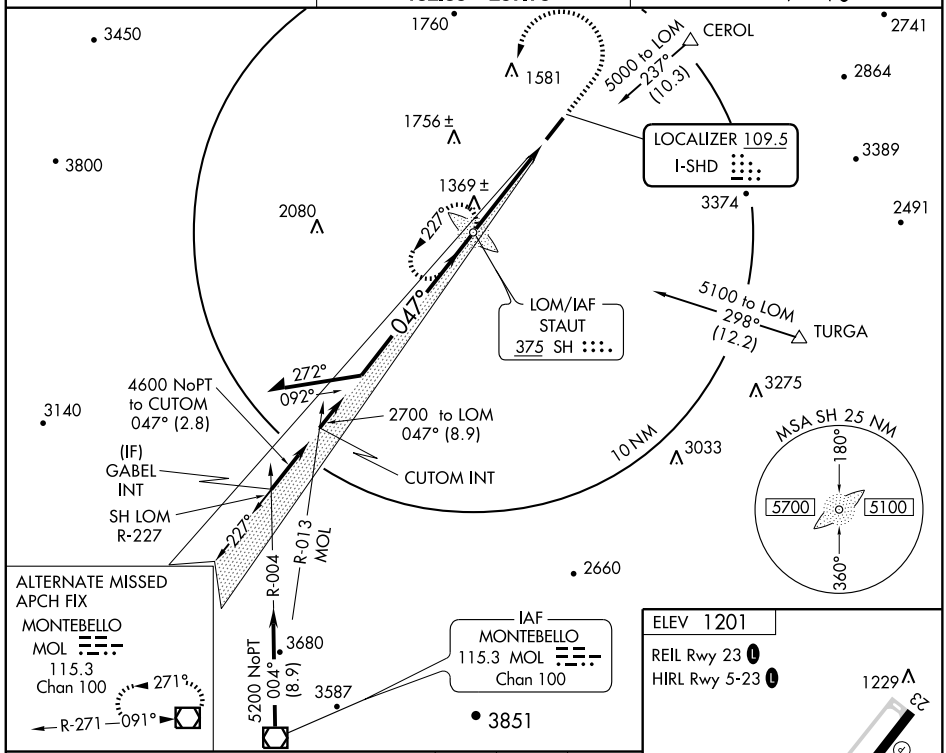
STAUNTON/ SHENANDOAH VALLEY RGNL (SHD)

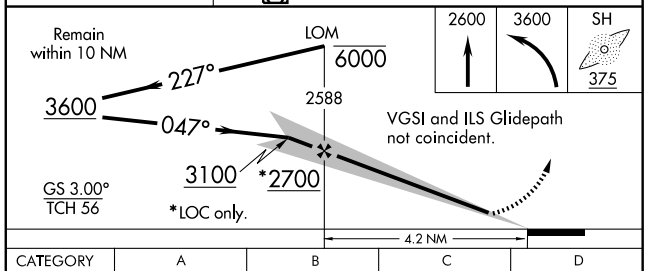
ADF Required. Autopilot coupled approach NA below 1494 feet. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet, all MDA 140 feet. Increase ILS visibility ¼ mile all Cats, LOC visibility Cat C/D ¼ mile and Circling Cat D ½ mile. For inoperative MALSR when using Charlottesville altimeter setting, increase ILS visibility to 1¼ miles.

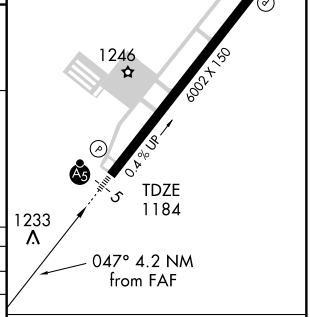
MALSR

MISSED APPROACH: Climb to 2600 then climbing left turn to 3600 direct SH LOM and hold.

AWOS-3	POTOMAC APP CON	UNICOM
124.925	132.85 257.75	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 5	1384-½ 200 (200-½)			
S-LOC 5	1620-½ 436 (500-½)		1620-¾ 436 (500-¾)	1620-1 436 (500-1)
CIRCLING	1620-1 419 (500-1)	1660-1 459 (500-1)	1660-1½ 459 (500-1½)	1820-2 619 (700-2)

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

NE-3. 14 JAN 2010 to 11 FEB 2010

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

LOM SH	APP CRS	Rwy ldg	6002
375	047°	TDZE	1184
		Apt Elev	1201

AL-5369 (FAA)

NDB RWY 5

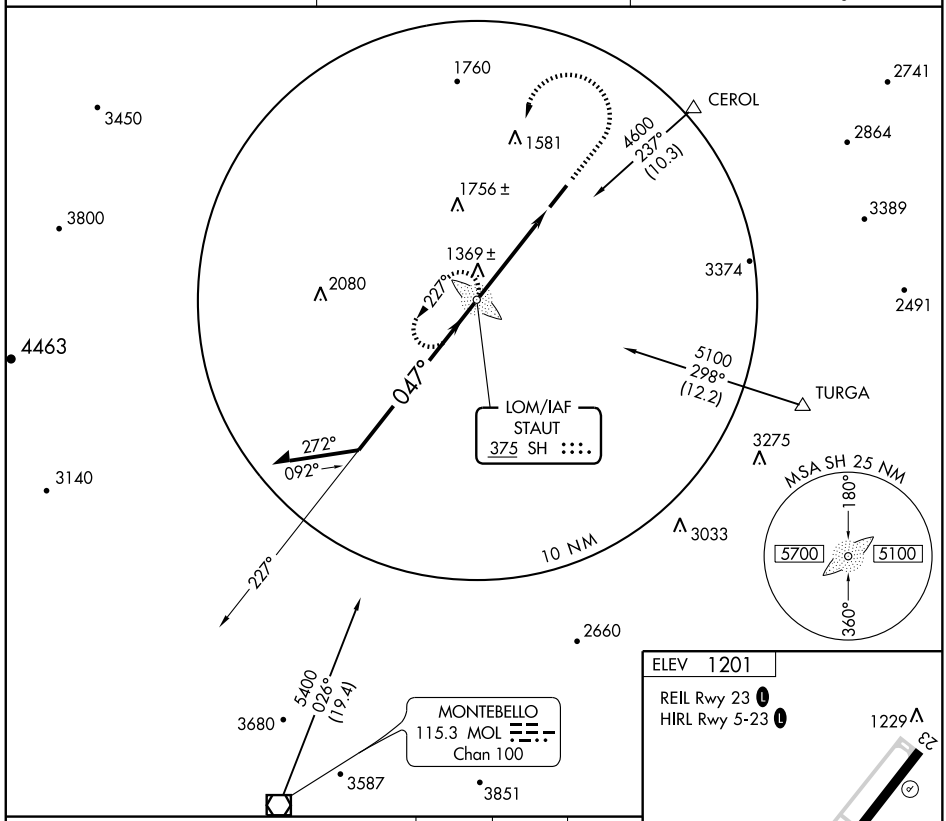
STAUNTON/ SHENANDOAH VALLEY RGNL (SHD)

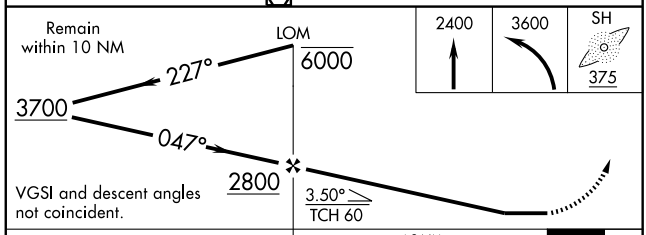
When local altimeter setting not received, use Charlottesville altimeter setting: increase all MDAs 140 feet and visibility S-5 and Circling Cat C/D ½ mile.

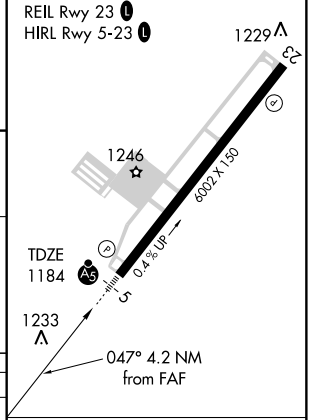
MALSR

MISSED APPROACH: Climb to 2400 then climbing left turn to 3600 direct SH LOM and hold.

AWOS-3	POTOMAC APP CON	UNICOM
124.925	132.85 257.75	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-5	1760-¾ 576 (600-¾)		1760-1 576 (600-1)	1760-1½ 576 (600-1½)
CIRCLING	1760-1 559 (600-1)		1760-1½ 559 (600-1½)	1820-2 619 (700-2)

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

NE-3. 14 JAN 2010 to 11 FEB 2010

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

WAAS CH **81913** **W05A**	APP CRS **047°**	Rwy ldg **6002** TDZE **1184** Apt Elev **1201**

AL-5369 (FAA)

RNAV (GPS) RWY 5

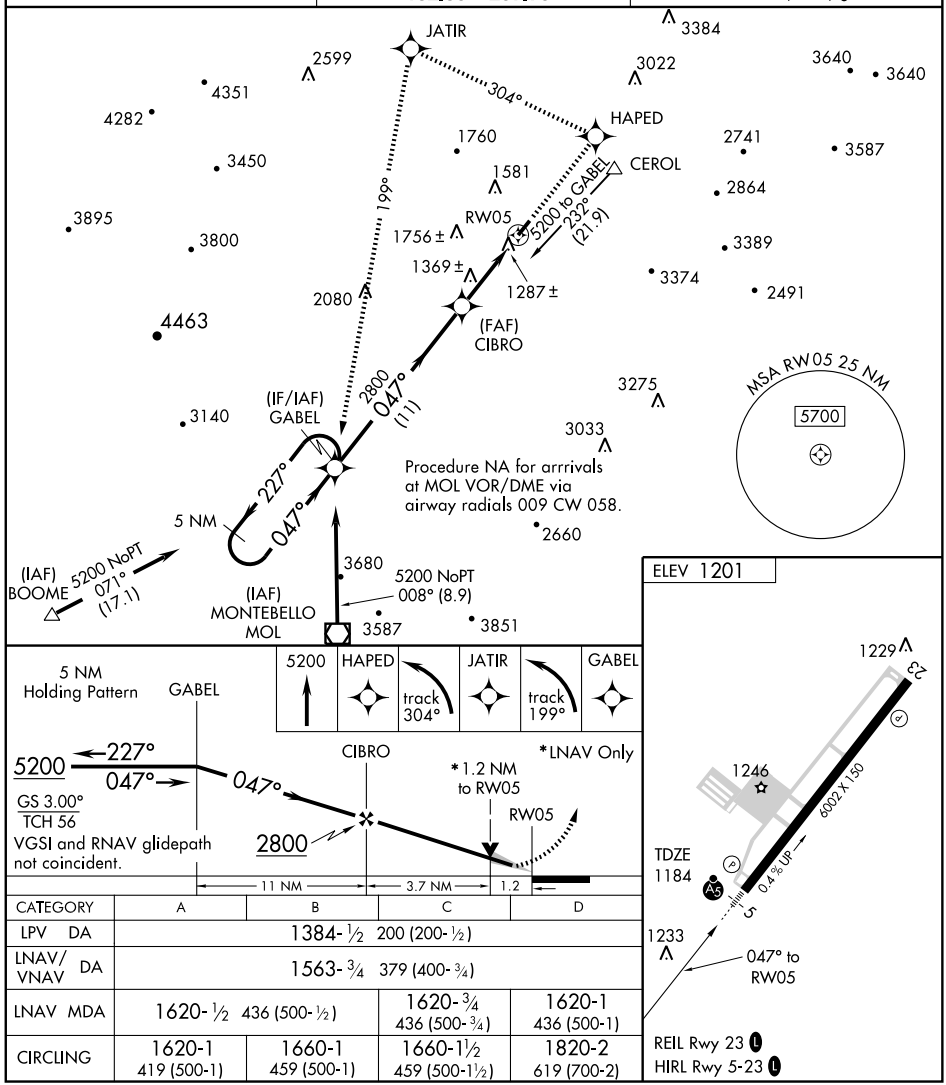
STAUNTON/ SHENANDOAH VALLEY RGNL (SHD)

For inoperative MALSR when using Charlottesville altimeter setting, increase LPV visibility to 1¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Charlottesville altimeter setting. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet, all MDA 140 feet. Increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats ½ mile, LNAV Cat C/D ¼ mile and Circling Cat D ½ mile.

MALSR

MISSED APPROACH: Climb to 5200 direct HAPED and left turn via track 304° to JATIR and left turn via track 199° to GABEL and hold.

AWOS-3	POTOMAC APP CON	UNICOM
124.925	**132.85 257.75**	**123.0** (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1384-½ 200 (200-½)			
LNAV/ VNAV DA	1563-¾ 379 (400-¾)			
LNAV MDA	1620-½ 436 (500-½)		1620-¾ 436 (500-¾)	1620-1 436 (500-1)
CIRCLING	1620-1 419 (500-1)	1660-1 459 (500-1)	1660-1½ 459 (500-1½)	1820-2 619 (700-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

WAAS CH 78113 W23A	APP CRS 227°	Rwy ldg 6002 TDZE 1201 Apt Elev 1201

AL-5369 (FAA)

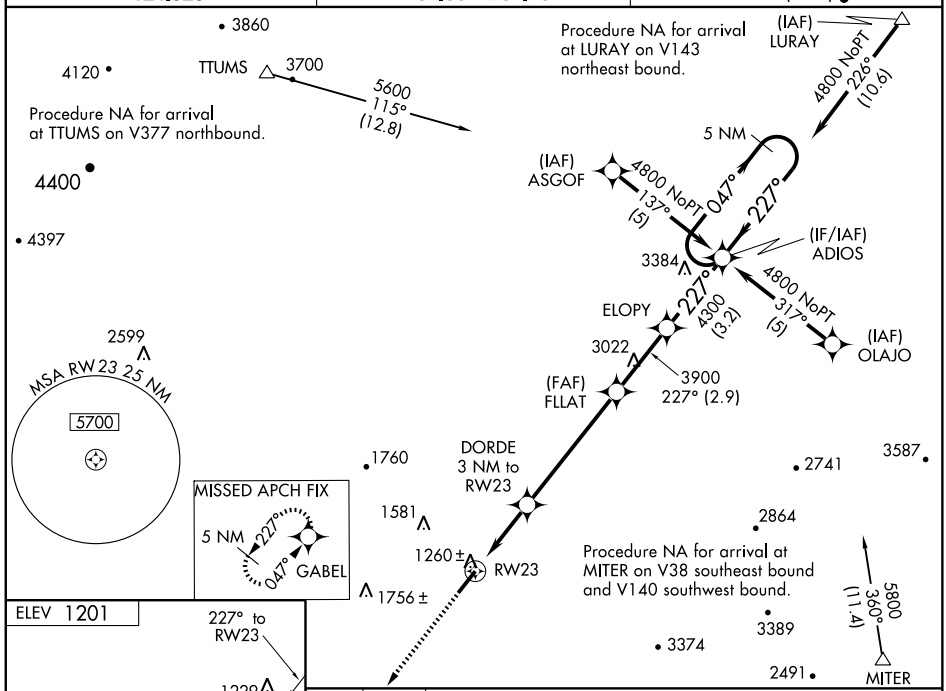
RNAV (GPS) RWY 23

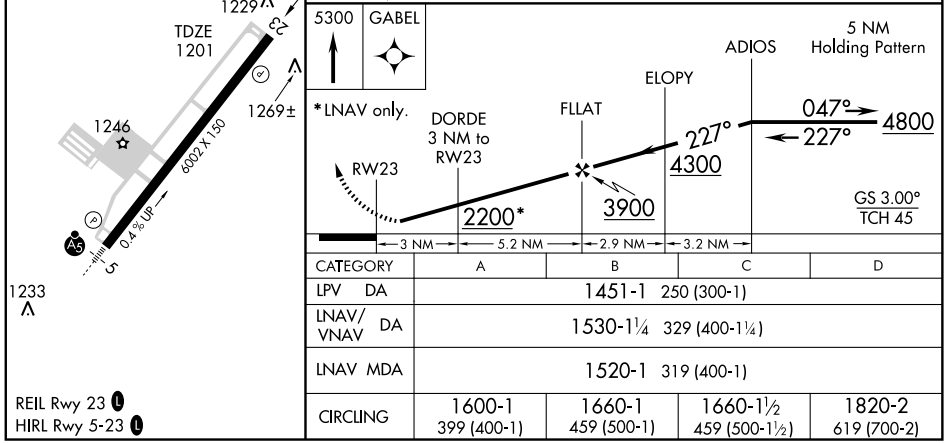
STAUNTON/ SHENANDOAH VALLEY RGNL (SHD)

Baro-VNAV NA when using Charlottesville altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below-17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Charlottesville altimeter setting and increase all DA 130 feet, all MDA 140 feet. Increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C visibility ¼ mile and LNAV Cat D and Circling Cat D visibility ½ mile.

MISSED APPROACH: Climb to 5300 direct GABEL and hold, continue climb-in-hold to 5300.

AWOS-3	POTOMAC APP CON	UNICOM
124.925	132.85 257.75	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1451-1 250 (300-1)			
LNAV/VNAV DA	1530-1¼ 329 (400-1¼)			
LNAV MDA	1520-1 319 (400-1)			
CIRCLING	1600-1 399 (400-1)	1660-1 459 (500-1)	1660-1½ 459 (500-1½)	1820-2 619 (700-2)

REIL Rwy 23 L
HIRL Rwy 5-23 L

NE-3, 14 JAN 2010 to 11 FEB 2010

SHENANDOAH ONE DEPARTURE

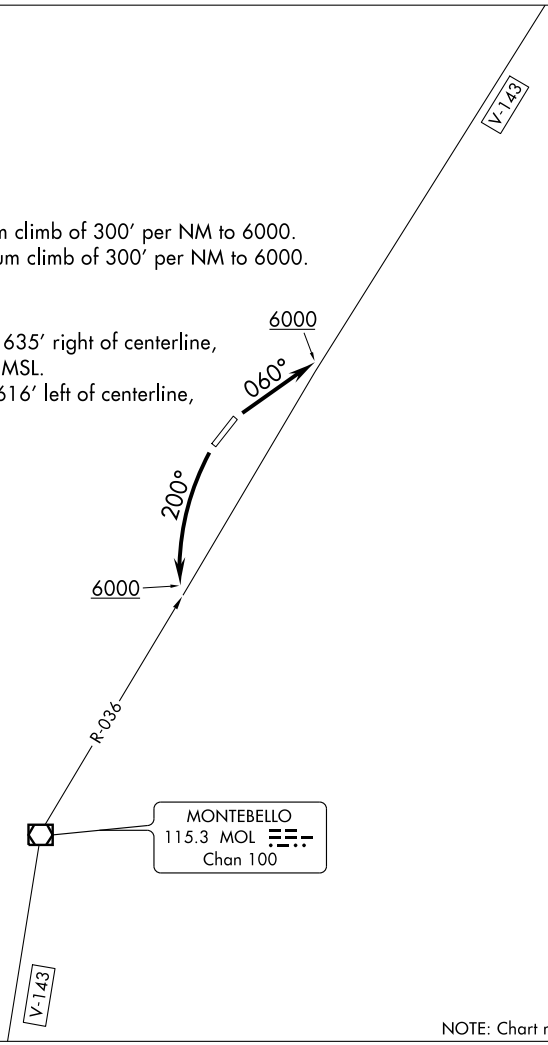
STAUNTON/SHENANDOAH VALLEY RGNL (SHD)
STAUNTON-WAYNESBORO-HARRISONBURG, VIRGINIA

POTOMAC DEP CON
132.85 257.75
CTAF 123.0
AWOS-3 124.925

NOTE: RADAR Required.

TAKE-OFF MINIMUMS:
Rwy 5, Standard with minimum climb of 300′ per NM to 6000.
Rwy 23, Standard with minimum climb of 300′ per NM to 6000.

TAKE-OFF OBSTACLES:
Rwy 5, Trees 1720′ from DER, 635′ right of centerline, up to 100′AGL/1279′ MSL.
Rwy 23, Tree 679′ from DER, 616′ left of centerline, 35′ AGL/1194′ MSL.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climb heading 060° to 6000 to intercept MOL VOR/DME R-036 outbound, thence. . . .
TAKE-OFF RUNWAY 23: Climbing left turn to 6000 heading 200° to intercept MOL VOR/DME R-036 inbound, thence . . . .

. . . . expect radar vectors to filed/assigned route. Expect clearance to filed altitude/flight level 10 minutes after departure.

LOC I-RKH	APP CRS	Rwy ldg	5007
111.5	037°	TDZE	67
		Apt Elev	72

LOC RWY 4

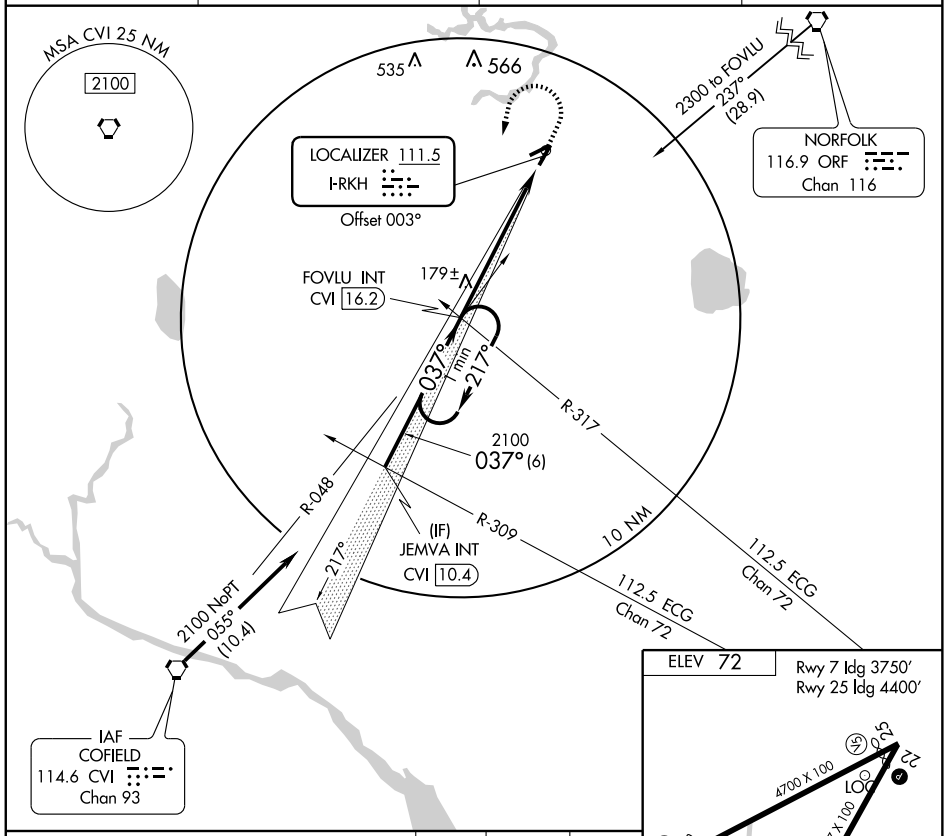
SUFFOLK EXECUTIVE (SFQ)

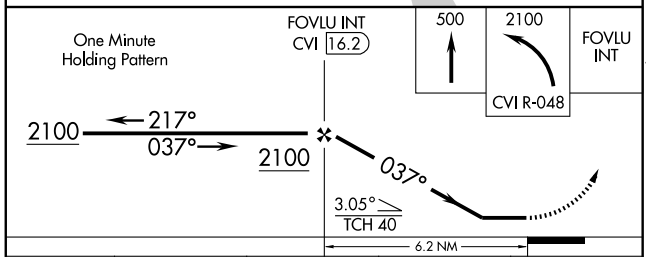
NA

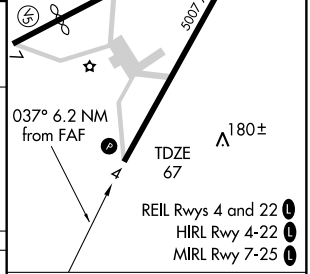
If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climb to 500, then climbing left turn to 2100 via CVI R-048 to FOVLU and hold.

AWOS-3	NORFOLK APP CON	UNICOM	GCO
119.375	127.9 269.42	122.7 (CTAF) L	135.075







CATEGORY	A	B	C	D
S-4	440-1 373 (400-1)			NA
CIRCLING	480-1 408 (500-1)	540-1 468 (500-1)	540-1½ 468 (500-1½)	NA

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04

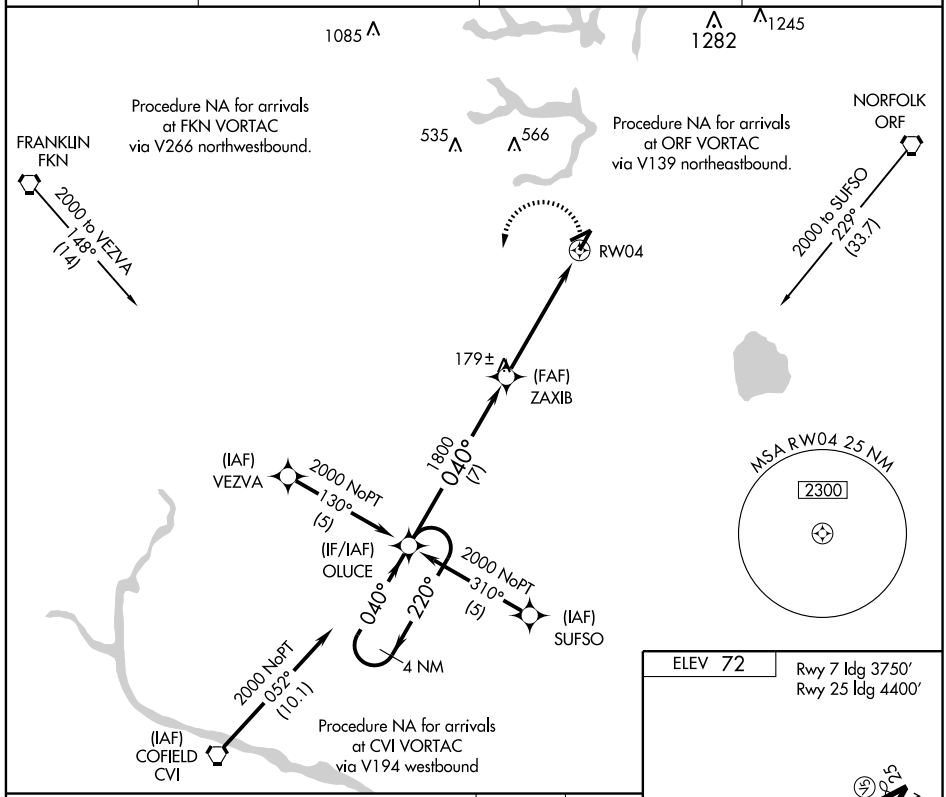
APP CRS	Rwy ldg	5007
040°	TDZE	67
	Apt Elev	72

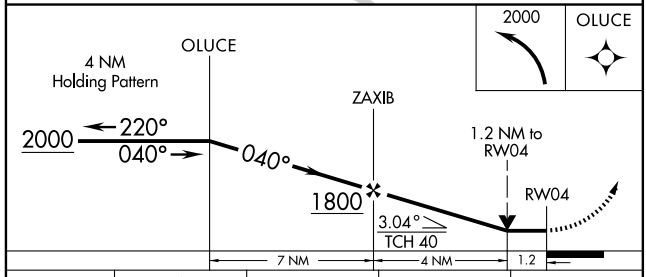
RNAV (GPS) RWY 4
SUFFOLK EXECUTIVE (SFQ)

If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 60 feet. VDP NA when using Norfolk Intl altimeter setting. DME/DME RNP-0.3 NA.

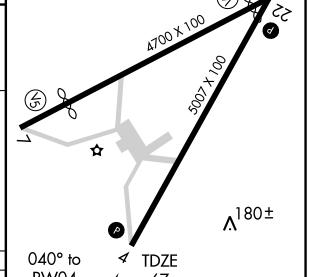
MISSED APPROACH: Climbing left turn to 2000 direct OLUCE and hold.

AWOS-3	NORFOLK APP CON	UNICOM	GCO
119.375	127.9 269.42	122.7 (CTAF) L	135.075





CATEGORY	A	B	C	D
LNAV MDA	480-1 413 (500-1)		480-1¼ 413 (500-1¼)	NA
CIRCLING	480-1 408 (500-1)	540-1 468 (500-1)	540-1½ 468 (500-1½)	NA



NE-3. 14 JAN 2010 to 11 FEB 2010

SUFFOLK, VIRGINIA

AL-6498 (FAA)

APP CRS	Rwy ldg	3750
074°	TDZE	72
	Apt Elev	72

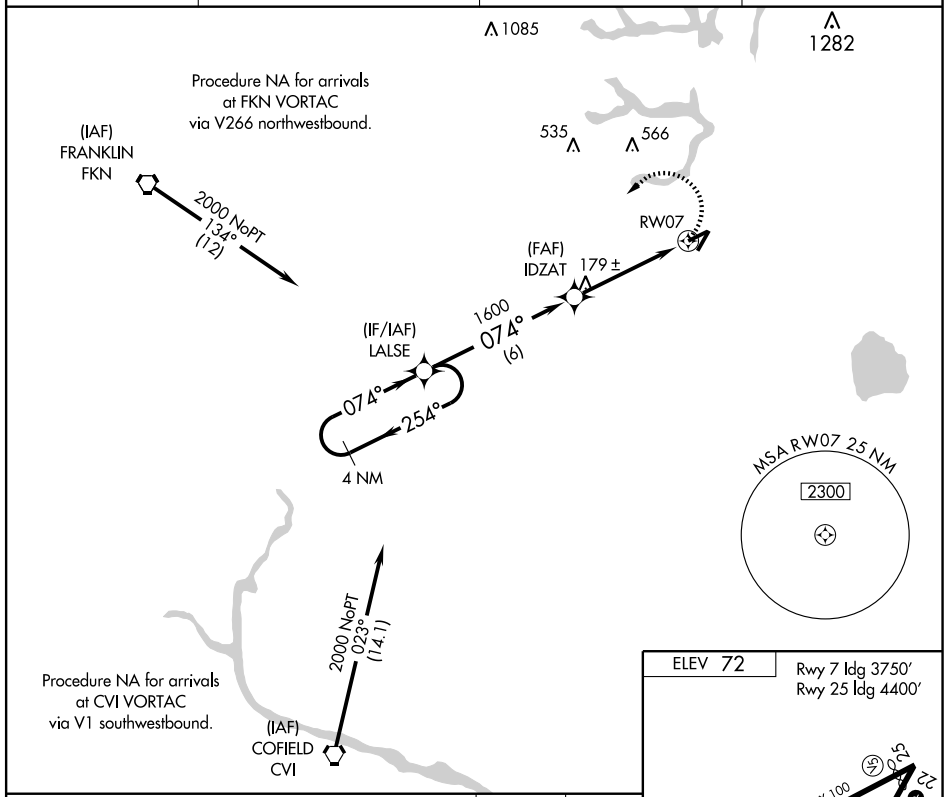
RNAV (GPS) RWY 7

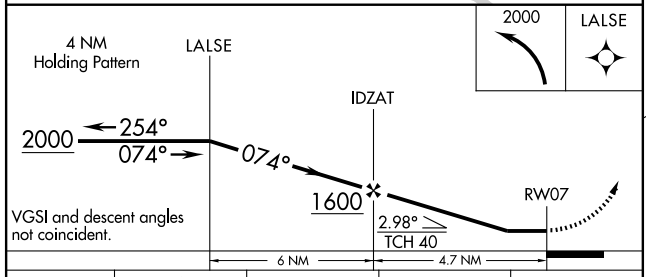
SUFFOLK EXECUTIVE (SFQ)

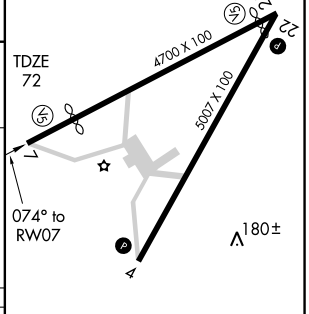
If local altimeter setting not received, use Norfolk Intl altimeter setting and increase all MDAs 60 feet.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2000 direct LALSE and hold.

AWOS-3	NORFOLK APP CON	UNICOM	GCO
119.375	127.9 269.42	122.7 (CTAF) L	135.075







CATEGORY	A	B	C	D
LNAV MDA	480-1 408 (500-1)		480-1¼ 408 (500-1¼)	NA
CIRCLING	480-1 408 (500-1)	540-1 468 (500-1)	540-1½ 468 (500-1½)	NA

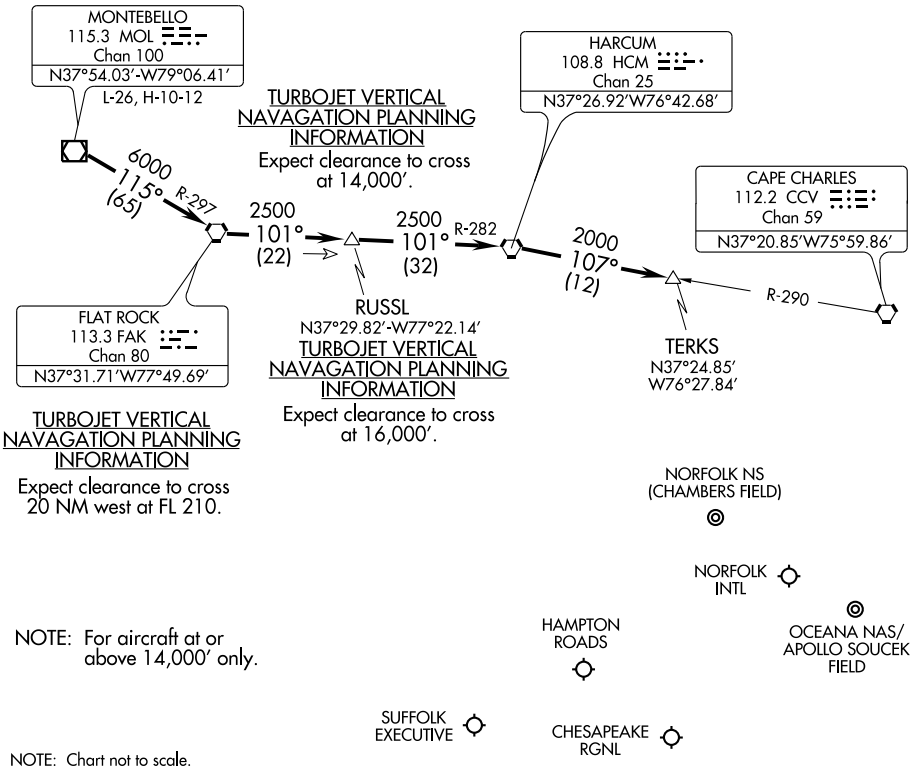
REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L
MIRL Rwy 7-25 L

NE-3. 14 JAN 2010 to 11 FEB 2010

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.

APP CRS	Rwy ldg	N/A
011°	TDZE	N/A
	Apt Elev	5

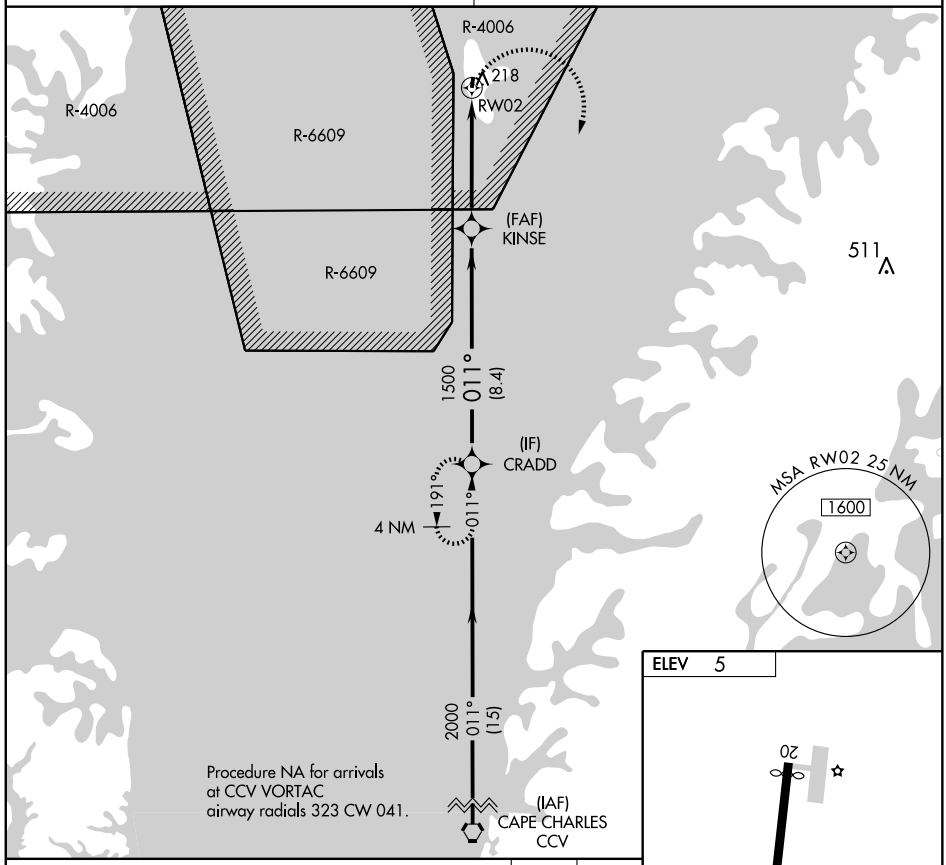
RNAV (GPS)-B
TANGIER ISLAND (TGI)

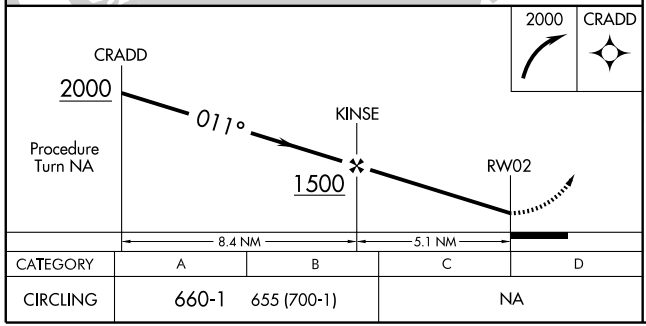
NA

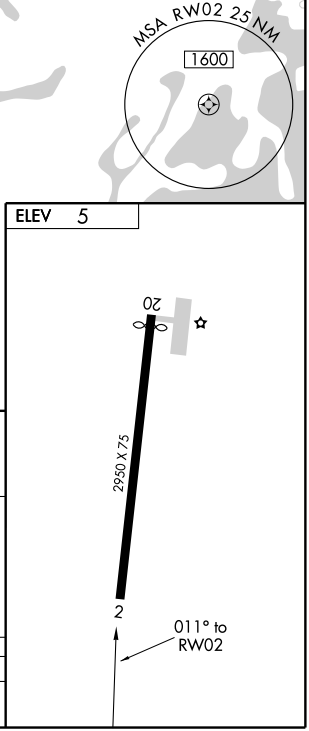
DME/DME RNP-0.3 NA. Procedure NA at night. Use Patuxent River NAS altimeter setting. Specific clearance from Patuxent App Con required before proceeding Northbound from CRADD. Approach is within R-6609 and underlies R-4006.

MISSED APPROACH: Climbing right turn to 2000 direct CRADD and hold.

PATUXENT APP CON★	UNICOM
121.0 250.3	122.8 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	660-1	655 (700-1)	NA	

VORTAC CCV 112.2 Chan 59	APP CRS 010°	Rwy ldg N/A TDZE N/A Apt Elev 5

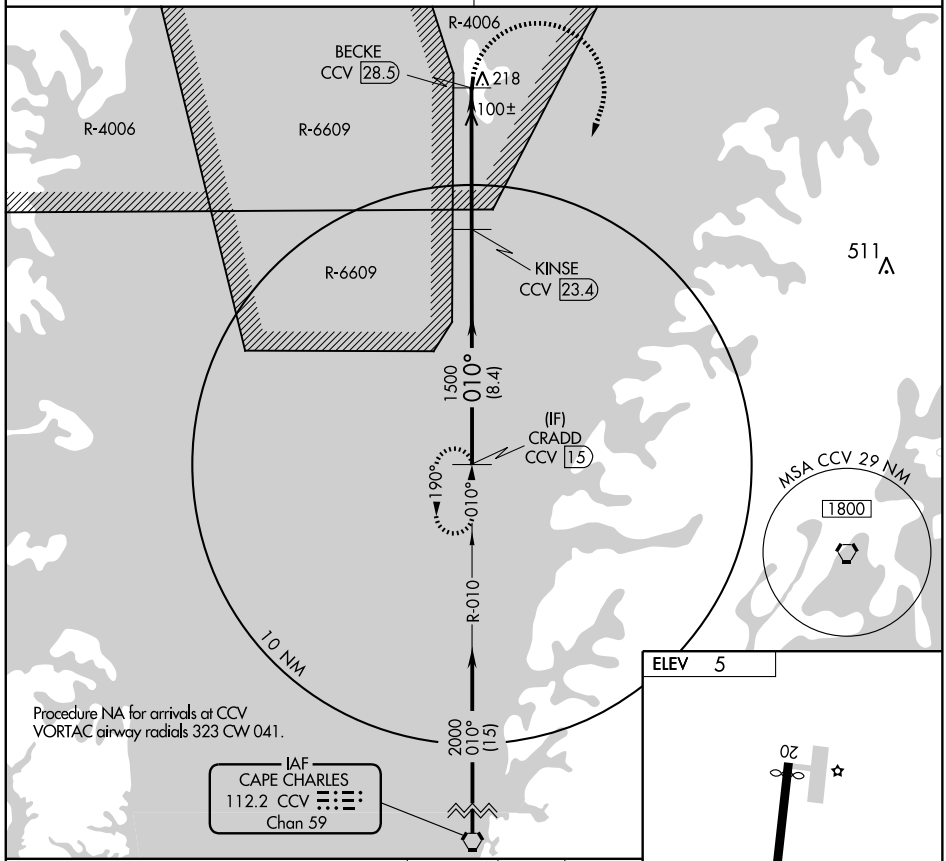
VOR/DME-A
TANGIER ISLAND (TGI)

NA

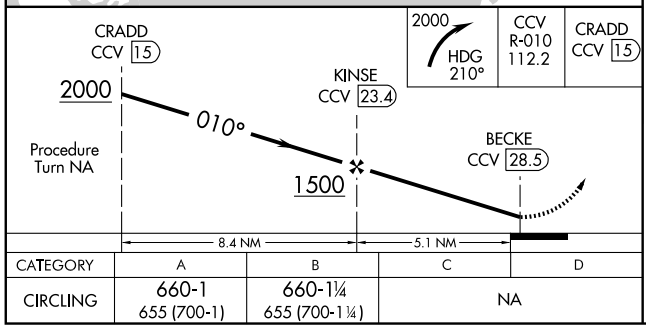
Procedure NA at night. Use Patuxent River NAS altimeter setting. Specific clearance from Patuxent App Con required before proceeding Northbound from CRADD. Approach is within R-6609 and underlies R-4006.

MISSED APPROACH: Climbing right turn to 2000 via heading 210° and CCV VORTAC R-010 to CRADD/CCV 15 DME and hold.

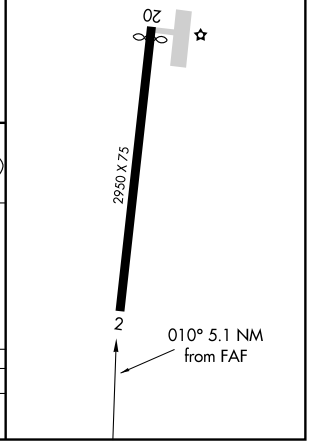
PATUXENT APP CON★	UNICOM
121.0 250.3	122.8 (CTAF)



Procedure NA for arrivals at CCV VORTAC airway radials 323 CW 041.



ELEV 5



CATEGORY	A	B	C	D
CIRCLING	660-1 655 (700-1)	660-1¼ 655 (700-1¼)	NA	

APP CRS	Rwy ldg	4300
097°	TDZE	135
	Apt Elev	135

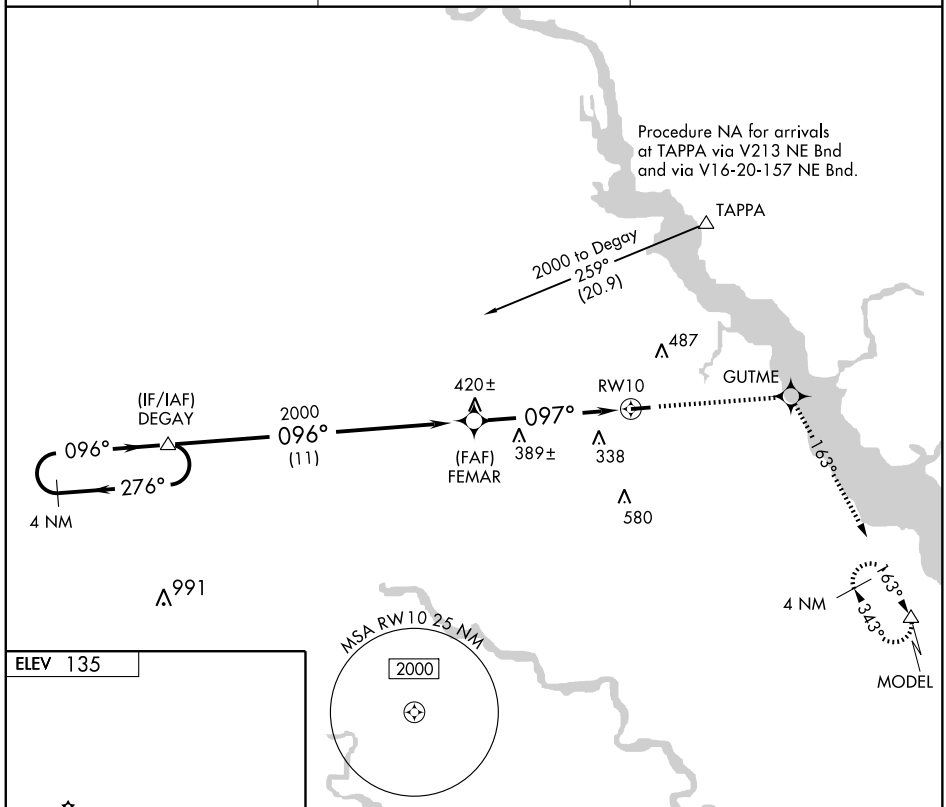
RNAV (GPS) RWY 10
TAPPAHANNOCK-ESSEX COUNTY (XSA)

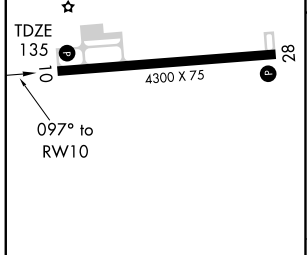
NA

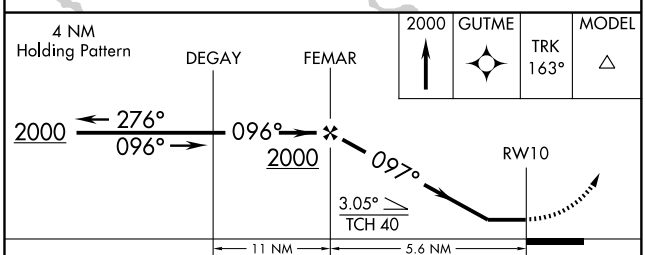
When local altimeter setting not received, use West Point altimeter setting and increase all MDA 80 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct GUTME and via 163° track to MODEL and hold.

AWOS-3	POTOMAC APP CON	UNICOM
125.775	126.4 282.375	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	640-1 505 (600-1)		NA	
CIRCLING	640-1 505 (600-1)		640-1½ 505 (600-1½)	NA

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS CH 99409 W28A	APP CRS 277°	Rwy ldg 4300 TDZE 129 Apt Elev 135

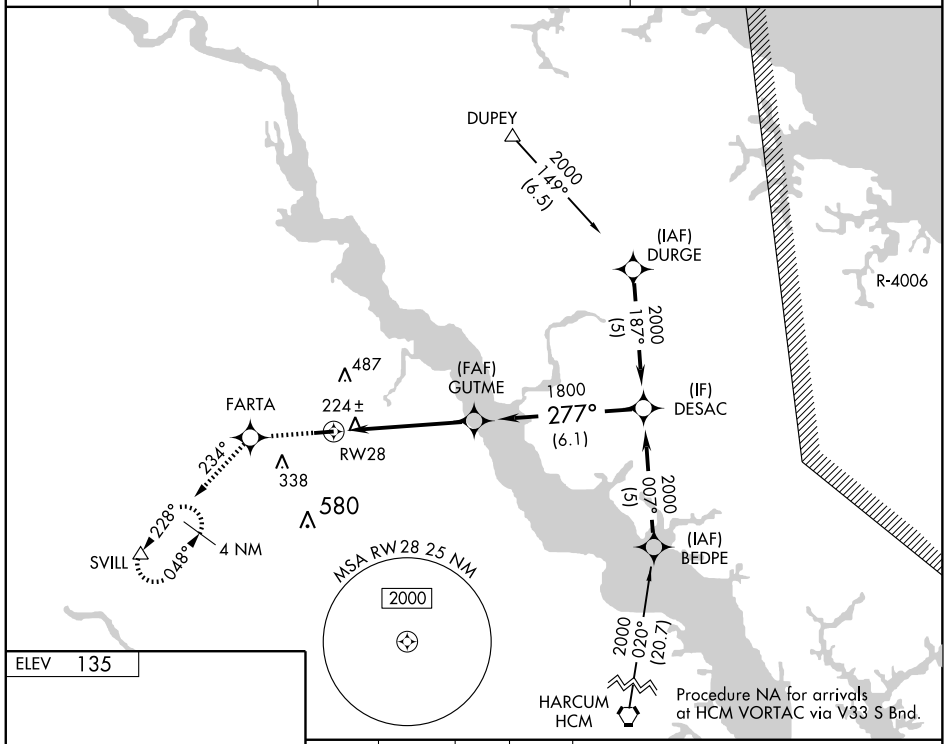
RNAV (GPS) RWY 28
TAPPAHANNOCK-ESSEX COUNTY (XSA)

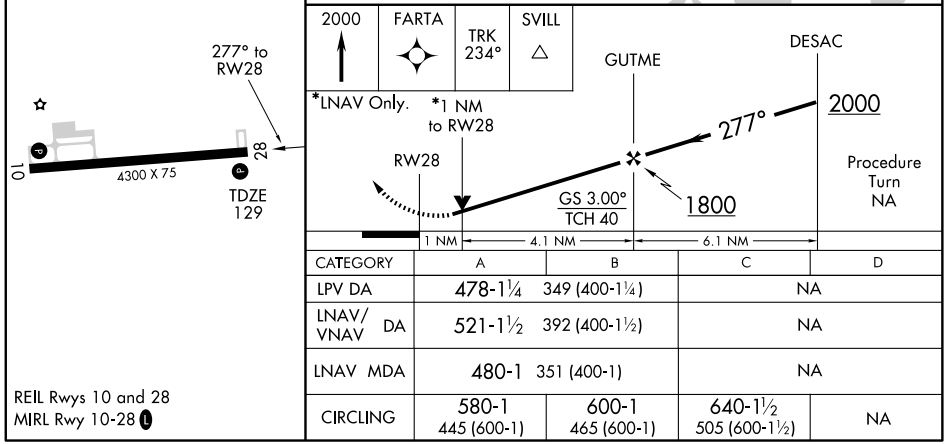
Baro-VNAV and VDP NA when using West Point altimeter setting. When local altimeter setting not received, use West Point altimeter setting and increase all DA 65 feet and all MDA 80 feet, increase LPV and LNAV/VNAV visilbilities ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C(5°F) or above 54°C(130°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climb to 2000 direct FARTA and via 234° track to SVILL and hold.

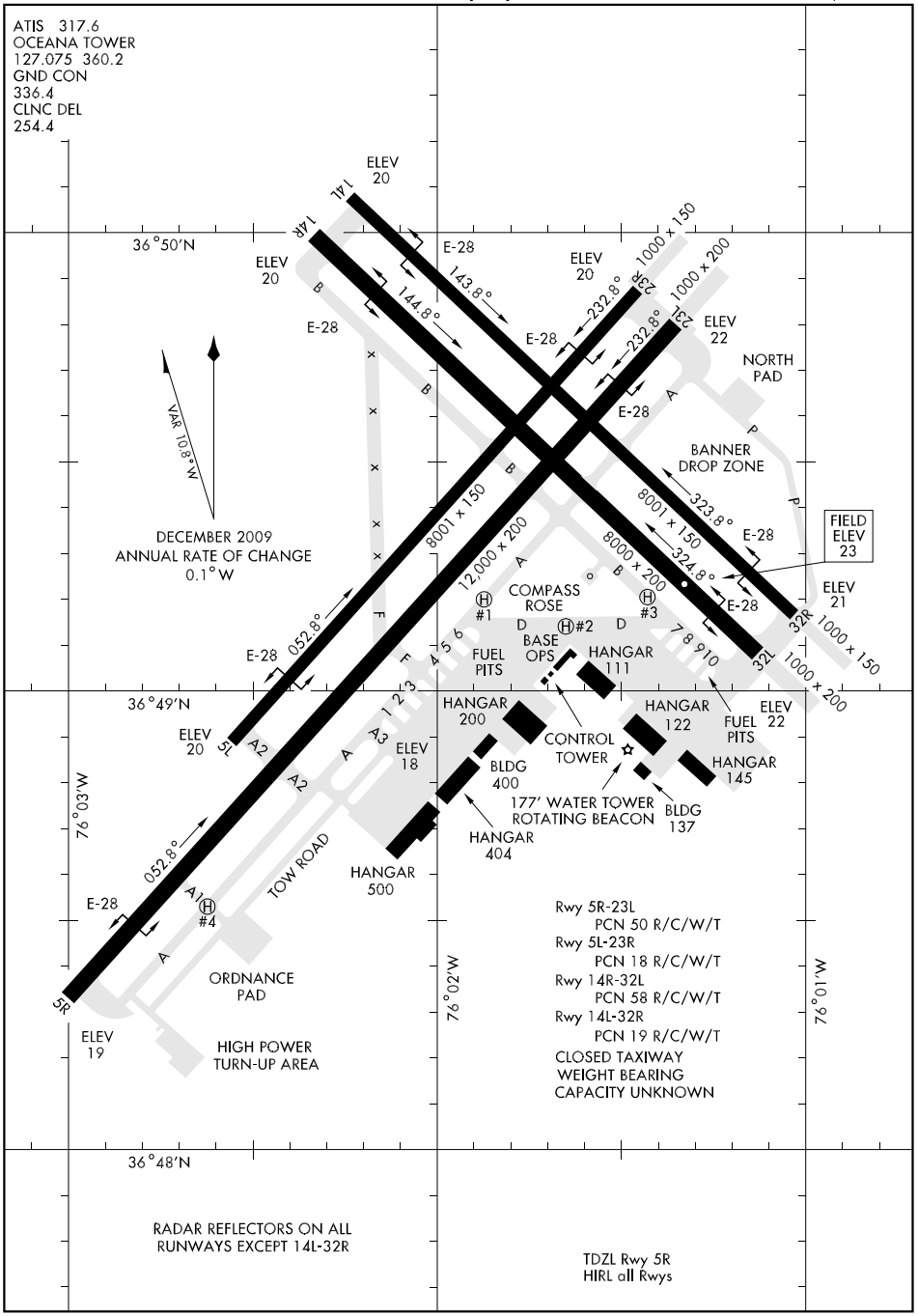
AWOS-3	POTOMAC APP CON	UNICOM
125.775	126.4 282.375	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	478-1¼ 349 (400-1¼)		NA	
LNAV/VNAV DA	521-1½ 392 (400-1½)		NA	
LNAV MDA	480-1 351 (400-1)		NA	
CIRCLING	580-1 445 (600-1)	600-1 465 (600-1)	640-1½ 505 (600-1½)	NA

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

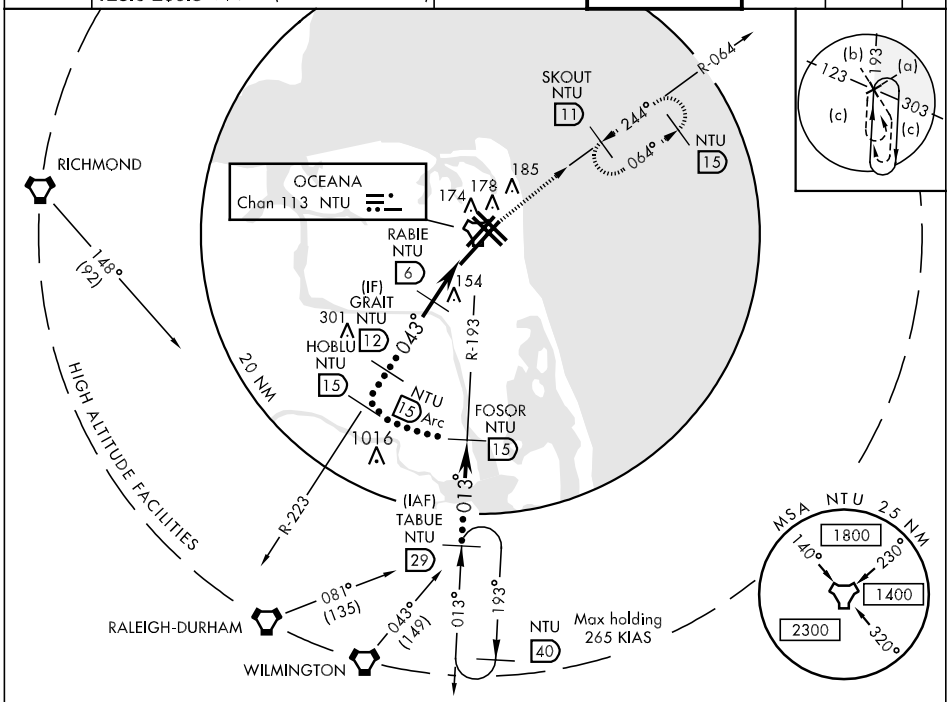

ATIS 317.6
OCEANA TOWER
127.075 360.2
GND CON
336.4
CLNC DEL
254.4
ELEV 20
14L
14R
36°50'N
ELEV 20
E-28
143.8°
144.8°
ELEV 20
1000 x 150
1000 x 200
232.8°
23R
23L
ELEV 22
NORTH PAD
VAR 10.8°W
DECEMBER 2009
ANNUAL RATE OF CHANGE
0.1°W
BANNER DROP ZONE
323.8°
324.8°
8001 x 150
8000 x 200
12,000 x 200
FIELD ELEV 23
ELEV 21
32R
32L
1000 x 150
1000 x 200
COMPASS ROSE
#1
#2
#3
BASE OPS
FUEL PITS
HANGAR 111
052.8°
5L
ELEV 20
36°49'N
HANGAR 200
HANGAR 122
ELEV 22
FUEL PITS
CONTROL TOWER
ELEV 18
BLDG 400
HANGAR 145
177' WATER TOWER
ROTATING BEACON
BLDG 137
HANGAR 404
76°03'W
TOW ROAD
HANGAR 500
#4
5R
ORDNANCE PAD
ELEV 19
HIGH POWER
TURN-UP AREA
76°02'W
Rwy 5R-23L
PCN 50 R/C/W/T
Rwy 5L-23R
PCN 18 R/C/W/T
Rwy 14R-32L
PCN 58 R/C/W/T
Rwy 14L-32R
PCN 19 R/C/W/T
CLOSED TAXIWAY
WEIGHT BEARING
CAPACITY UNKNOWN
76°01'W
36°48'N
RADAR REFLECTORS ON ALL
RUNWAYS EXCEPT 14L-32R
TDZL Rwy 5R
HIRL all Rwys

HI-TACAN RWY 5L

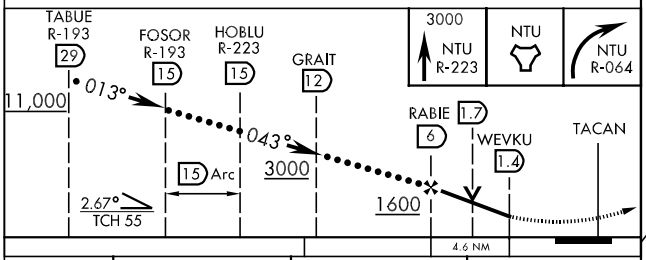
TACAN NTU Chan 113	APCH CRS 043°	Rwy ldg 8001 TDZE 21 Arpt Elev 23	JAL-934 [USN]	OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

MISSED APPROACH: Climb to 3000 via R-223 to NTU TACAN then via R-064 to SKOUT and hold.

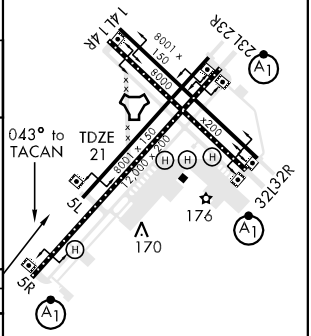
ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH (NTU R-360 to R-150) 123.9 266.8 SOUTH (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



EMERG SAFE ALT 100 NM 2600



ELEV 23



TDZL Rwy 5R
HIRL all Rwy

CATEGORY	C	D	E
S-5L	420-1 399 (400-1)	420-1¼ 399 (400-1¼)	420-1½ 399 (400-1½)
CIRCLING	480-1½ 457 (500-1½)	580-2 557 (600-2)	620-2 597 (600-2)

HI-TACAN RWY 5R

TACAN NTU Chan 113	APCH CRS 043°	Rwy ldg 12,000 TDZE 20 Arpt Elev 23

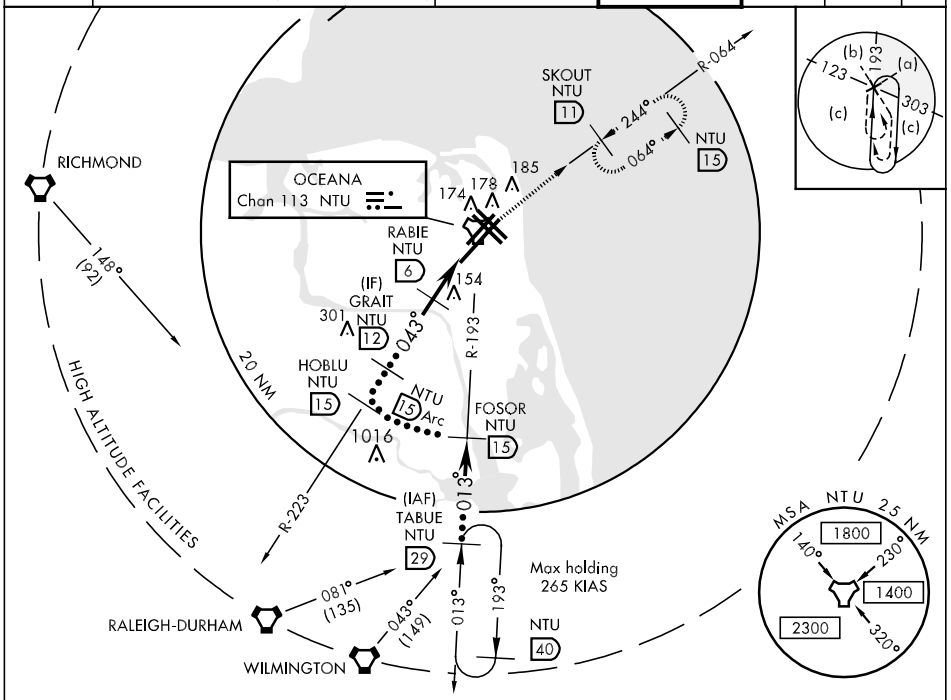
JAL-934 [USN] OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

* When ALS inop, increase vis CAT C to 1 mile, CAT D to 1¼ miles, CAT E to 1½ miles.

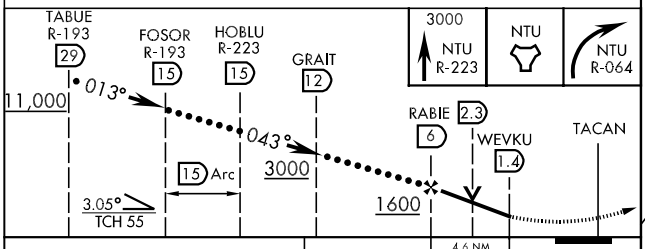
ALSF-1

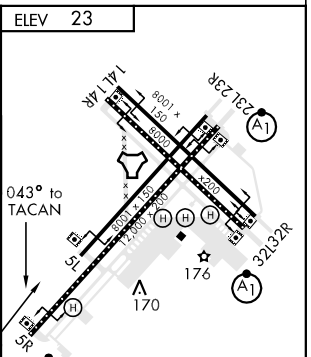
MISSED APPROACH: Climb to 3000 via R-223 to NTU TACAN then via R-064 to SKOUT and hold.

ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH (NTU R-360 to R-150) 123.9 266.8 SOUTH (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



EMERG SAFE ALT 100 NM 2600





CATEGORY	C	D	E
S-5R *	420- ¾ 400 (400- ¾)		420-1 400 (400-1)
CIRCLING	480-1½ 457 (500-1½)	580-2 557 (600-2)	620-2 597 (600-2)

TDZL Rwy 5R
HIRL all Rwy

HI-TACAN RWY 23L/R

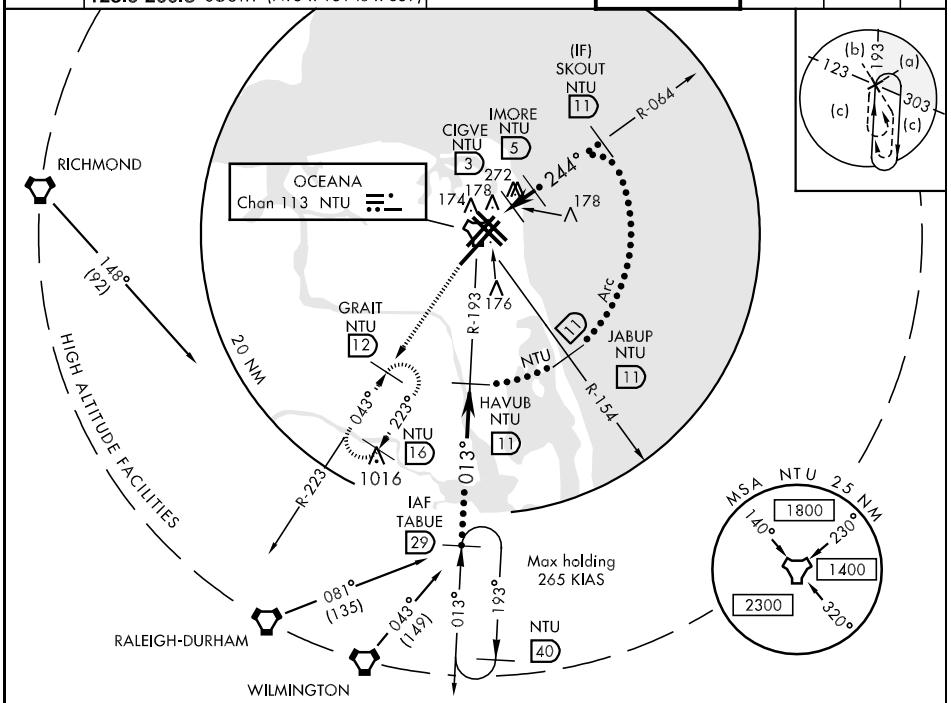
TACAN NTU Chan 113	APCH CRS 244°	Rwy ldg 23L 12,000 23R 8001 TDZE 23L 22 23R 21 Arpt Elev 23	JAL-934 [USN] OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

* When ALS inop, increase vis CAT CD to 1¼ miles, CAT E to 1½ miles.

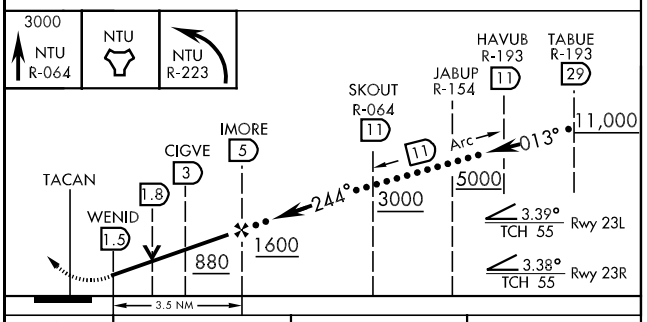
ALSF-1 (A1)

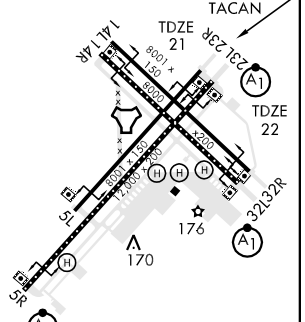
MISSED APPROACH: Climb to 3000 via R-064 to NTU TACAN then via R-223 to GRAIT and hold.

ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH (NTU R-360 to R-150) 123.9 266.8 SOUTH (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



EMERG SAFE ALT 100 NM 2600





CATEGORY	C	D	E
S-23L *	440-¾ 418 (500-¾)		440-1 418 (500-1)
S-23R	440-1¼ 419 (500-1¼)		440-1½ 419 (500-1½)
CIRCLING	480-1½ 457 (500-1½)	580-2 557 (600-2)	620-2 597 (600-2)

TDZL Rwy 5R
HIRL all Rwy

HI-TACAN RWY 32L/R

TACAN NTU Chan 113	APCH CRS 309°	Rwy ldg TDZE Arpt Elev	32L 8000 32R 8001 / 32L 23 32R 21 / 23

JAL-934 [USN]

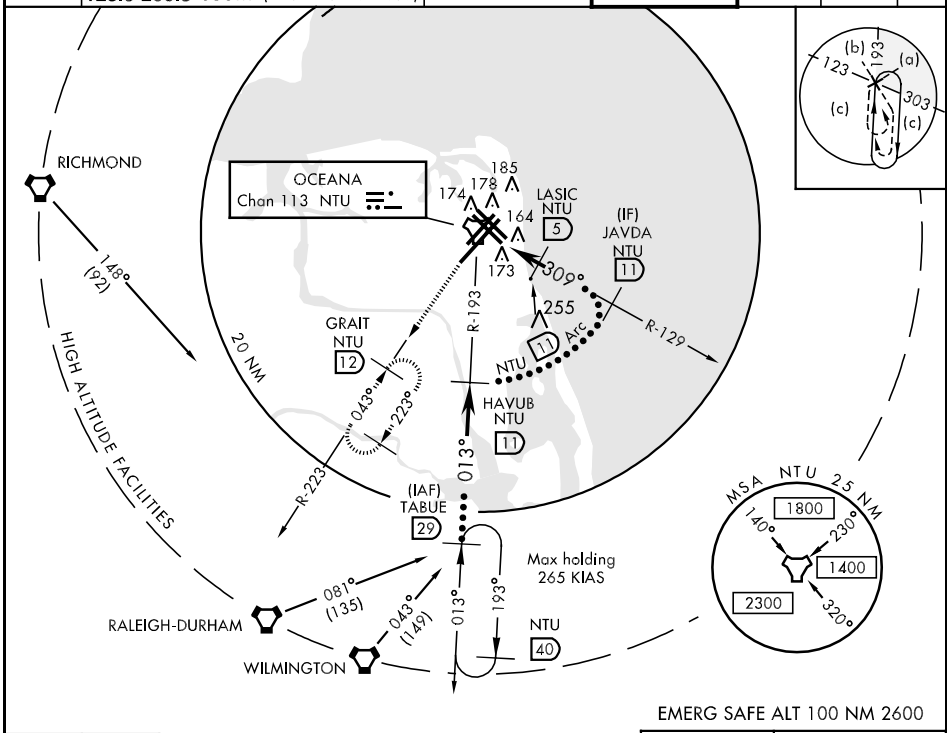
OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

* When ALS inop, increase vis CAT CD to 1¼ miles, CAT E to 1½ miles.

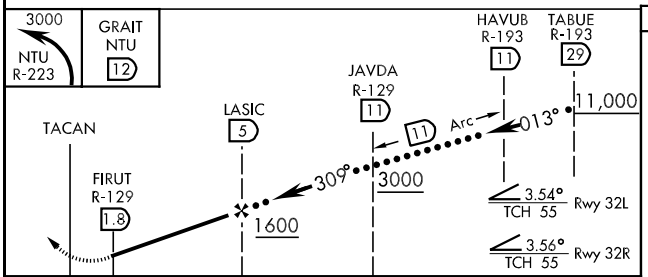
ALSF-1 (A1)

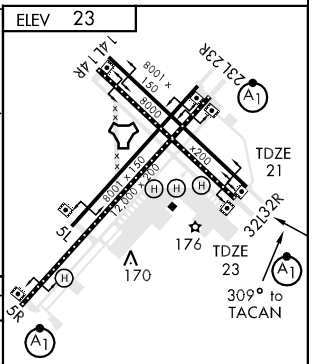
MISSED APPROACH: Climbing left turn to 3000, intercept NTU R-223 to GRAIT and hold.

ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH (NTU R-360 to R-150) 123.9 266.8 SOUTH (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



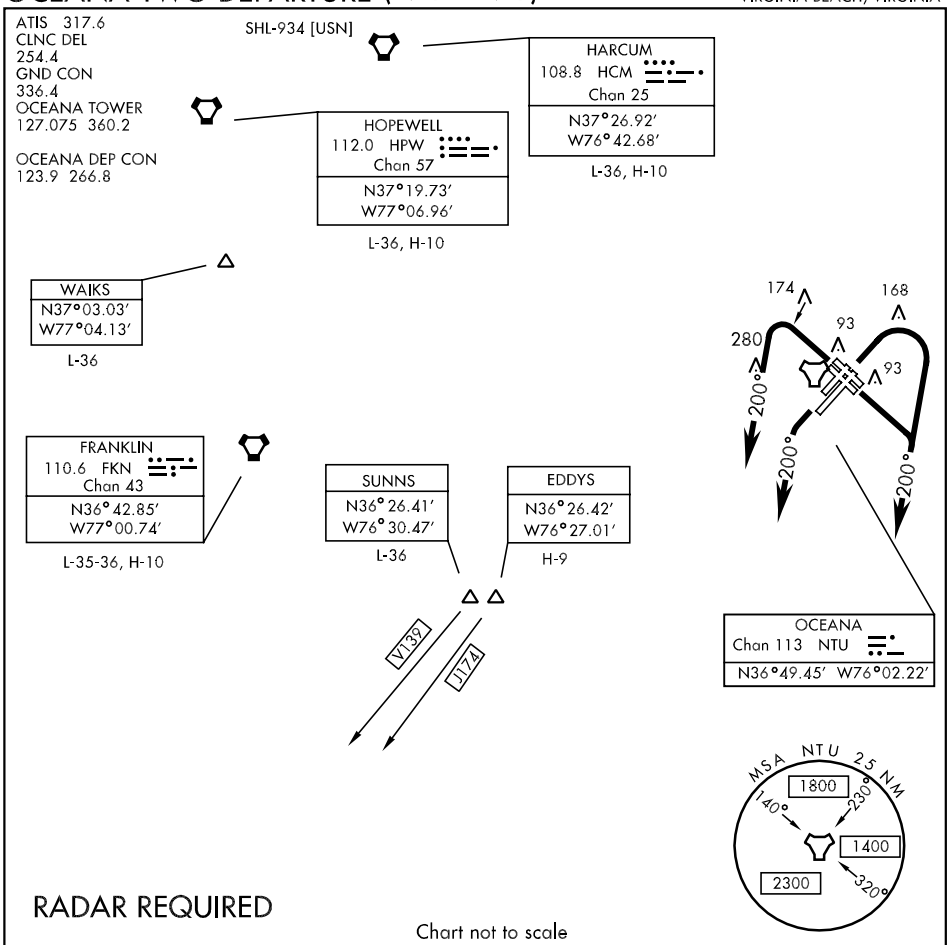
EMERG SAFE ALT 100 NM 2600





CATEGORY	C	D	E
S-32L *	440- ¾ 417 (500- ¾)		440-1 417 (500-1)
S-32R	440-1¼ 419 (500-1¼)		440-1½ 419 (500-1½)
CIRCLING	480-1½ 457 (500-1½)	580-2 557 (600-2)	620-2 597 (600-2)

TDZL Rwy 5R
HIRL all Rwy



RADAR REQUIRED

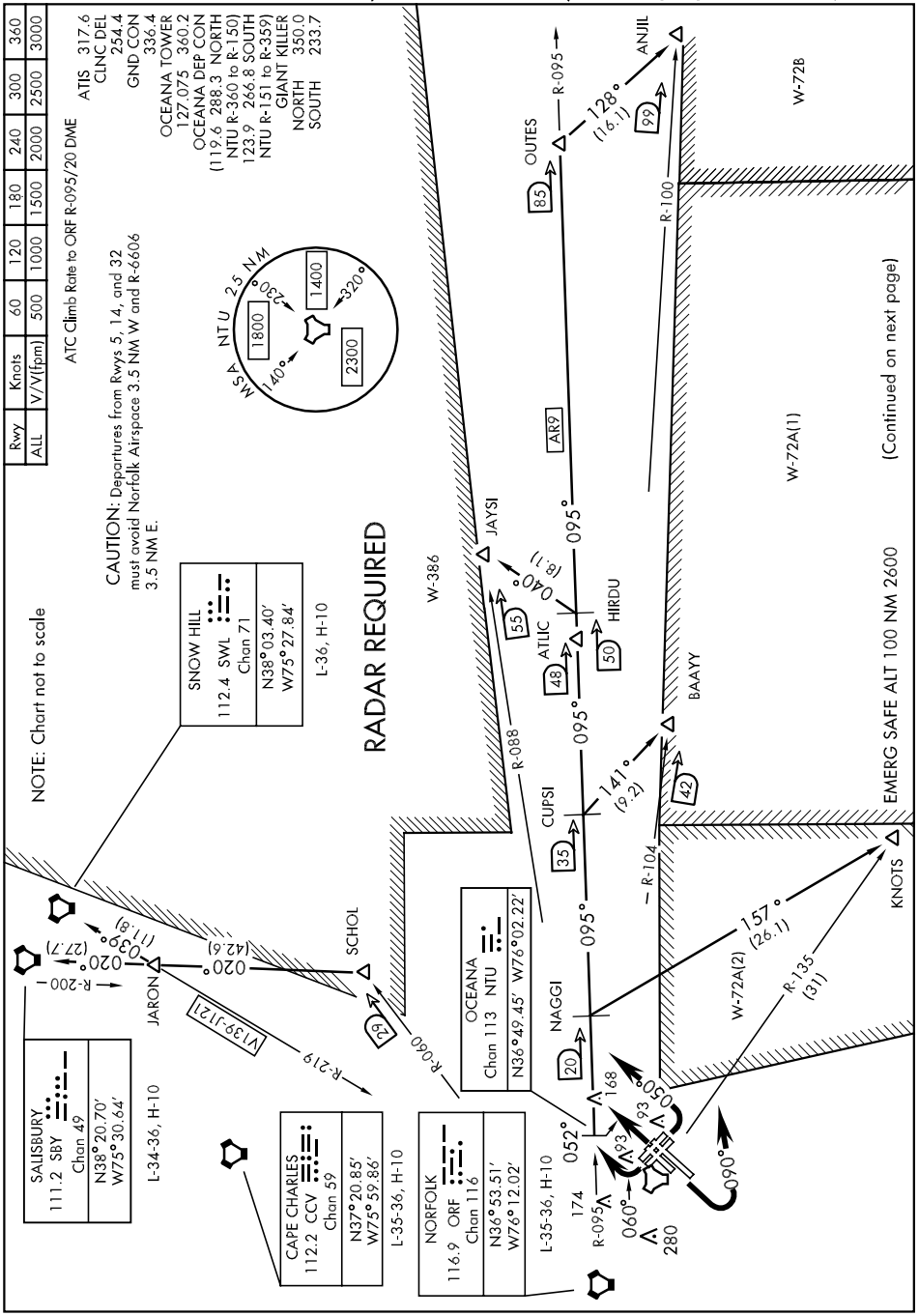
Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 5L/R: Climb via heading 052°, leaving 600, turn right heading 200°. Thence...
TAKE-OFF RWY 14L/R: Climb via heading 144°, leaving 600, turn right heading 200°. Thence...
TAKE-OFF RWY 23L/R: Climb via heading 232°, leaving 1000, turn left heading 200°. Thence...
TAKE-OFF RWY 32L/R: Climb via heading 324°, leaving 500, turn left heading 200°. Thence...
...Maintain 4000 or assigned lower altitude.

EDDYS TRANSITION (NTU1.EDDYS): Via radar vectors to EDDYS.
FRANKLIN TRANSITION (NTU1.FKN): Via radar vectors to FKN VORTAC.
HARCUM TRANSITION (NTU1.HCM): Via radar vectors to HCM VORTAC.
HOPEWELL TRANSITION (NTU1.HPW): Via radar vectors to HPW VORTAC.
(Note: At or below 17,000 only).
SUNNS TRANSITION (NTU1.SUNNS): Via radar vectors to SUNNS.
(Note: At or below 17,000 only).
WAIKS TRANSITION (NTU1.WAIKS): Via radar vectors to WAIKS.

OCEANA-TWO DEPARTURE (NTU2•NTU)
VIRGINIA BEACH, VIRGINIA


Rwy | Knots | 60 | 120 | 180 | 240 | 300 | 360
ALL | V/V(fpm) | 500 | 1000 | 1500 | 2000 | 2500 | 3000
ATC Climb Rate to ORF R-095/20 DME
ATIS 317.6
CLNC DEL 254.4
GND CON 336.4
OCEANA TOWER 127.075 360.2
OCEANA DEP CON (119.6 288.3 NORTH
NTU R-360 to R-150)
123.9 266.8 SOUTH
NTU R-151 to R-359)
GIANT KILLER
NORTH 350.0
SOUTH 233.7
CAUTION: Departures from Rwys 5, 14, and 32 must avoid Norfolk Airspace 3.5 NM W and R-6606 3.5 NM E.
NOTE: Chart not to scale
MSA NTU 2.5 NM
140°
230°
320°
1800
1400
2300
SNOW HILL
112.4 SWL
Chan 71
N38°03.40'
W75°27.84'
L-36, H-10
RADAR REQUIRED
W-386
JAYSI
OUTES
R-095
128°
(16.1)
ANJIL
99
85
R-100
W-72B
AR9
095°
040°
(8.1)
55
ATLIC
48
HIRDU
50
BAAYY
42
R-088
CUPSI
35
141°
(9.2)
R-104
W-72A(1)
(Continued on next page)
EMERG SAFE ALT 100 NM 2600
KNOTS
157°
(26.1)
R-135
(31)
W-72A(2)
NAGGI
20
168
050°
090°
052°
174
R-095
060°
280
OCEANA
Chan 113 NTU
N36°49.45' W76°02.22'
SCHOL
62
R-060
R-219
V139-J121
JARON
020°
(42.6)
(27.7)
R-200
039°
(11.8)
SALISBURY
111.2 SBY
Chan 49
N38°20.70'
W75°30.64'
L-34-36, H-10
CAPE CHARLES
112.2 CCV
Chan 59
N37°20.85'
W75°59.86'
L-35-36, H-10
NORFOLK
116.9 ORF
Chan 116
N36°53.51'
W76°12.02'
L-35-36, H-10

SHL-934 [USN]

DEPARTURE ROUTE DISCRIPTION

TAKE-OFF RWY 5L/R: Climb via heading 052°. Thence . . .
TAKE-OFF RWY 14L/R: Climb via heading 144°, leaving 600 turn left to heading 050°. Thence . . .
TAKE-OFF RWY 23L/R: Climb via heading 232°, leaving 1000 turn left to heading 090°. Thence . . .
TAKE-OFF RWY 32L/R: Climb via heading 324°, to assigned altitude, turn right heading 060° within NTU 2 DME. Thence . . .

Via radar vectors to assigned transition. Maintain 7000 (props), 10,000 (jets). Thence . . .

ANJIL TRANSITION (NTU013): Via ORF-095 to OUTES then via heading 128° to ANJIL.

ATLIC TRANSITION (SOUC9.ATLIC): Via ORF-095 to ATLIC.

BAAYY TRANSITION (NTU011): Via ORF-095 to CUPSI then via heading 141° to BAAYY.

CAPE CHARLES TRANSITION (SOUC9.CCV): Via radar vectors to CCV VORTAC.

JAYSI TRANSITION (NTU012): Via ORF-095 to HIRDU then via heading 040° to JAYSI.

KNOTS TRANSITION (NTU002): Via ORF-095 to NAGGI then via heading 157° to KNOTS.

SALISBURY TRANSITION (SOUC9.SBY): Via radar vectors to SCHOL, then via SBY R-200 to SBY VORTAC.

SCHOL TRANSITION (SOUC9.SCHOL): Via radar vectors to SCHOL.

SNOW HILL TRANSITION (SOUC9.SWL): Via radar vectors to SCHOL, then via SBY R-200 to JARON, then via SWL R-219 to SWL VORTAC.

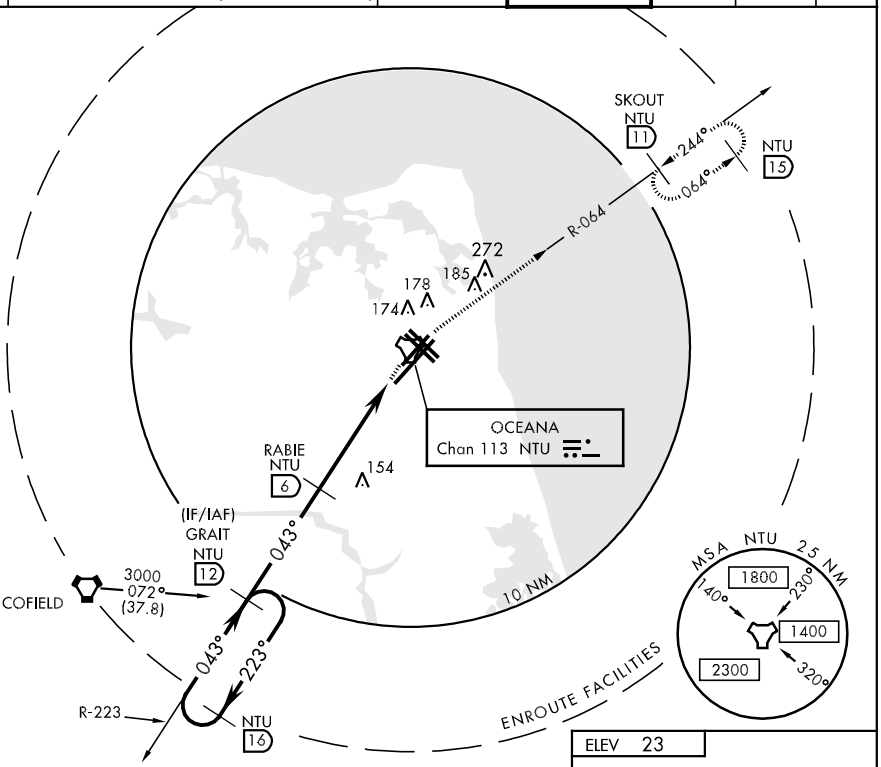
TACAN RWY 5L

TACAN	APCH CRS	Rwy ldg / TDZE / Arpt Elev
NTU Chan **113**	**043°**	**8001** / **21** / **23**

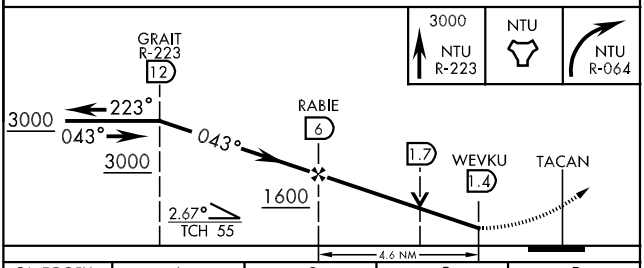
AL-934 [USN] OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

MISSED APPROACH: Climb to 3000 via R-223 to NTU TACAN then via R-064 to SKOUT and hold.

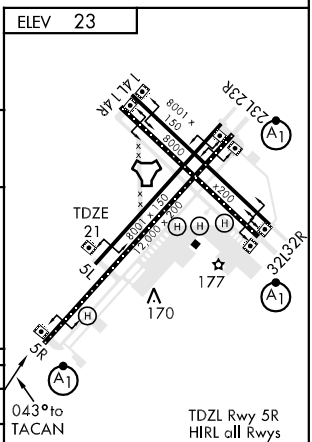
ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	**119.6 288.3 NORTH** (NTU R-360 to R-150) **123.9 266.8 SOUTH** (NTU R-151 to R-359)	**126.05 372.1**	**127.075 360.2**	**336.4**	**254.4**	



EMERG SAFE ALT 100 NM 2600



CATEGORY	A	B	C	D
S-5L	420-1	399 (400-1)		420-1¼ 399 (400-1¼)
CIRCLING	480-1 457 (500-1)		480-1½ 457 (500-1½)	580-2 557 (600-2)



TACAN RWY 5R

AL-934 [USN]

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

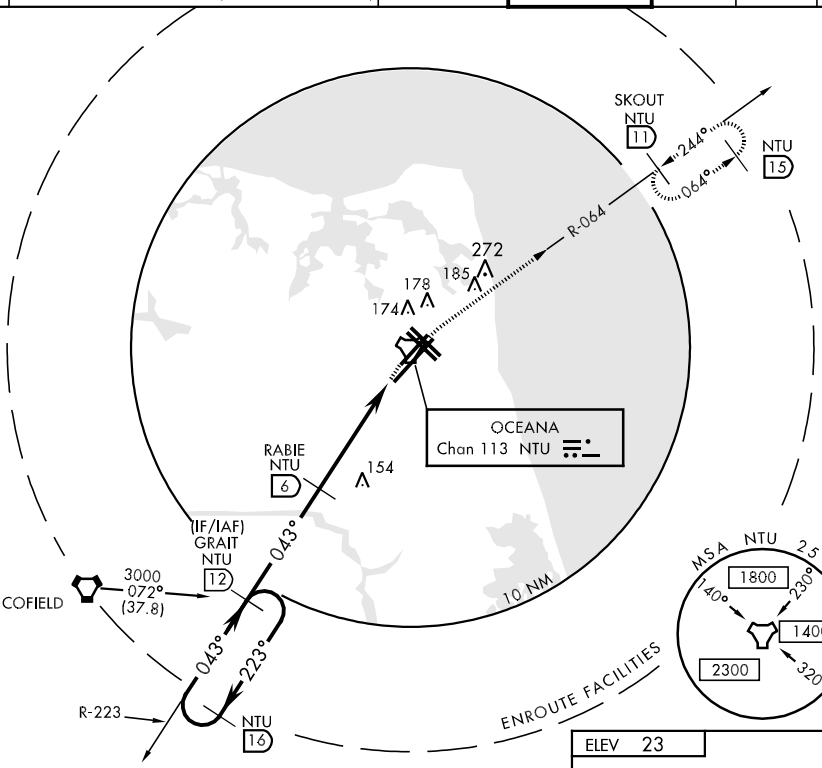
TACAN NTU Chan 113	APCH CRS 043°	Rwy ldg 12,000 TDZE 20 Arpt Elev 23

* When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles.

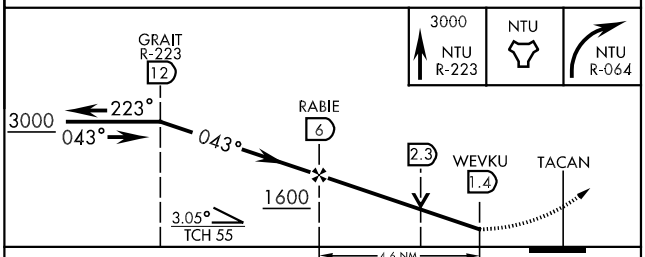
ALSF-1

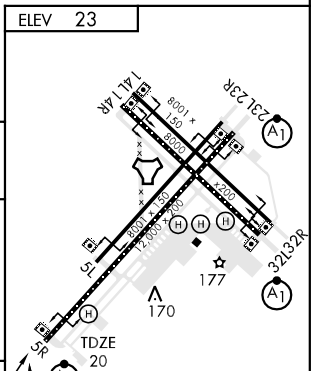
MISSED APPROACH: Climb to 3000 via R-223 to NTU TACAN then via R-064 to SKOUT and hold.

ATIS	OCEANA APP CON	NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH (NTU R-360 to R-150) 123.9 266.8 SOUTH (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



EMERG SAFE ALT 100 NM 2600





CATEGORY	A	B	C	D
S-5R *	420-½ 400 (400-½)		420-¾ 400 (400-¾)	
CIRCLING	480-1 457 (500-1)		480-1½ 457 (500-1½)	580-2 557 (600-2)

TACAN RWY 23L/R

TACAN NTU Chan 113	APCH CRS 244°	Rwy ldg 23L 12,000 23R 8001 TDZE 23L 22 23R 21 Arpt Elev 23	AL-934 [USN]

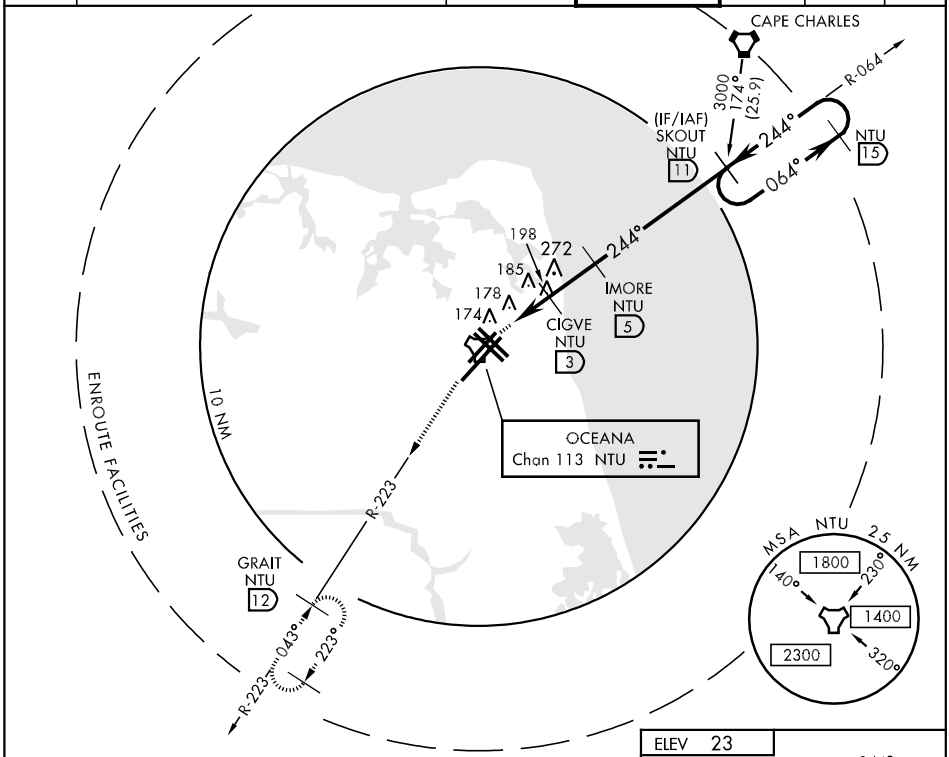
OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

T * When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles.

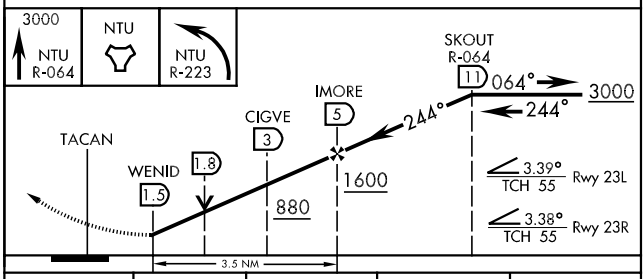
ALSF-1 A1

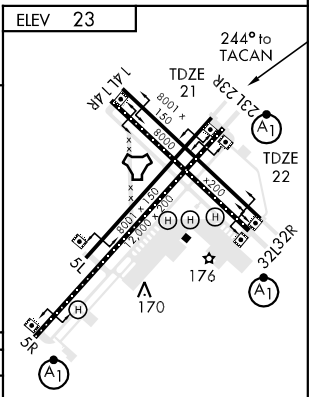
MISSED APPROACH: Climb to 3000 via R-064 to NTU TACAN then via R-223 to GRAIT and hold.

ATIS	OCEANA APP CON		NORFOLK APP CON	OCEANA TOWER	GND CON	CLNC DEL	ASR/PAR
317.6	119.6 288.3 NORTH 123.9 266.8 SOUTH	(NTU R-360 to R-150) (NTU R-151 to R-359)	126.05 372.1	127.075 360.2	336.4	254.4	



EMERG SAFE ALT 100 NM 2600





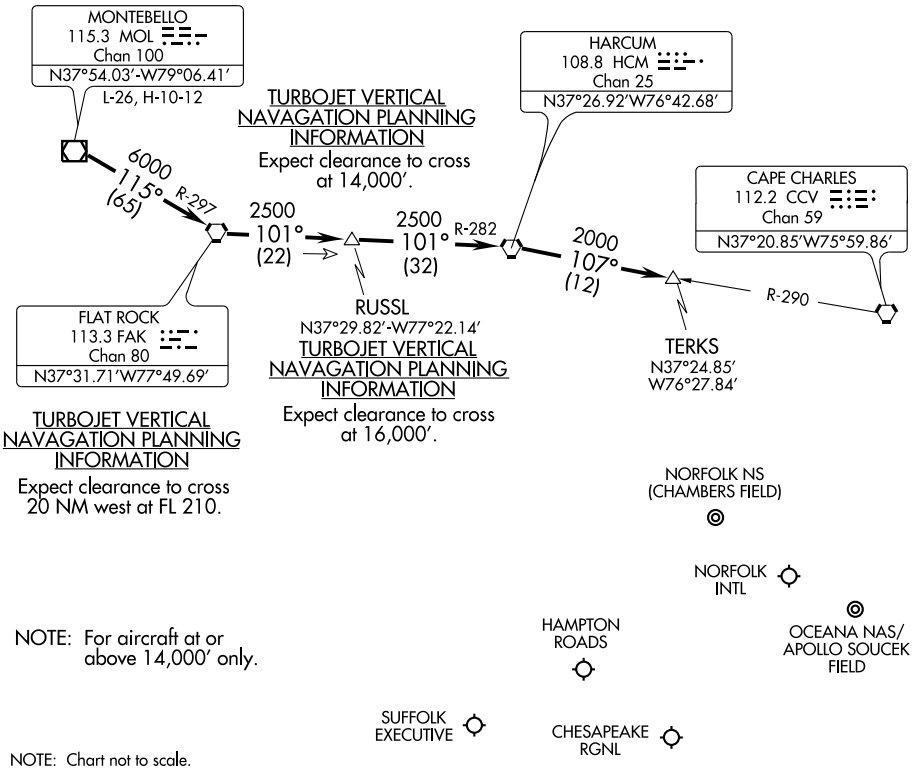
CATEGORY	A		B	C		D	
S-23L *	440-½	418	(500-½)	440-¾	418	(500-¾)	
S-23R	440-1	419	(500-1)	440-1¼	419	(500-1¼)	
CIRCLING	480-1	457	(500-1)	480-1½ 457 (500-1½)		580-2 557 (600-2)	

TDZL Rwy 5R
HIRL all Rwy

TERKS TWO ARRIVAL

NORFOLK, VIRGINIA

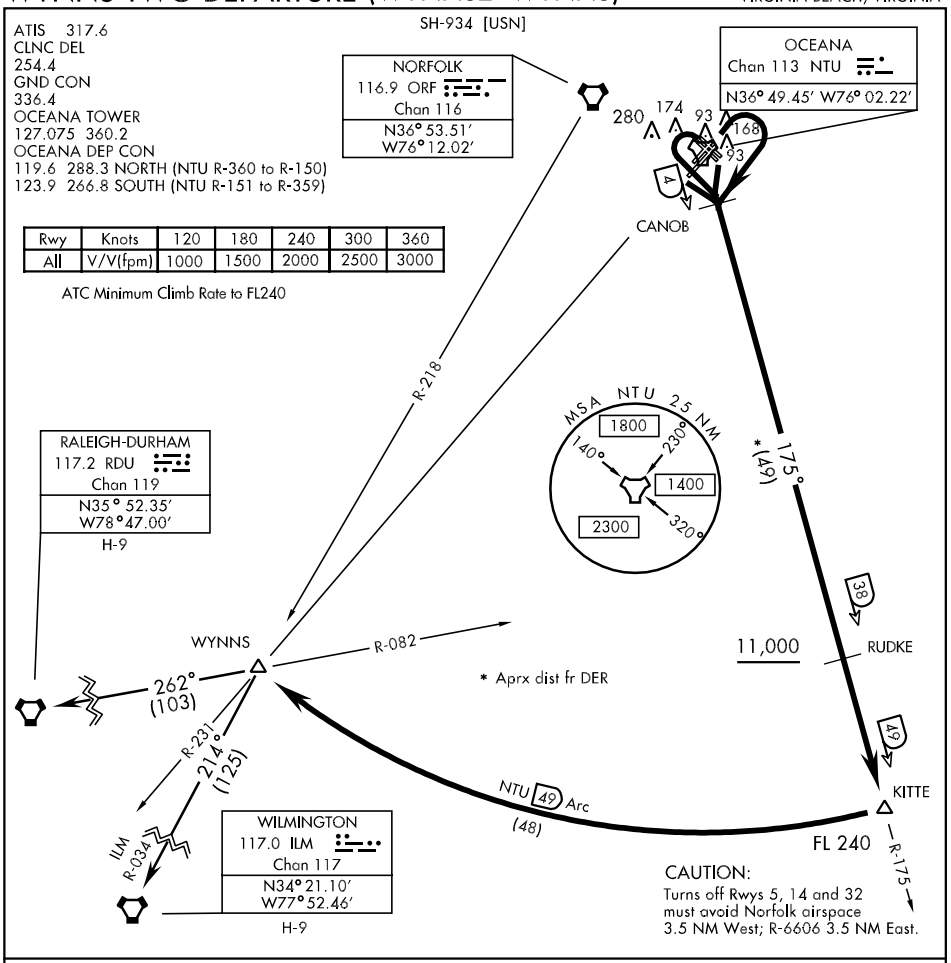
NORFOLK APP CON
118.9 353.7
NORFOLK INTL ATIS
127.15
NORFOLK NS ATIS
118.425 342.0
OCEANA NAS ATIS
317.6



NOTE: For aircraft at or above 14,000' only.

NOTE: Chart not to scale.

From over MOL VOR/DME via R-115 and FAK R-297 to FAK VORTAC, then via FAK R-101 and HCM R-282 to HCM VORTAC, then via HCM R-107 and CCV R-290 to TERKS INT. Expect radar vectors to the final approach course after the TERKS INT.



Rwy	Knots	120	180	240	300	360
All	V/V(fpm)	1000	1500	2000	2500	3000

ATC Minimum Climb Rate to FL240

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 5L/R or 14L/R: Climbing right turn to intercept NTU R-175 prior to CANOB. Thence . . .

TAKE-OFF RWY 23L/R: Climbing left turn to intercept NTU R-175 prior to CANOB. Thence . . .

TAKE-OFF RWY 32L/R: Climbing left turn within NTU 2 DME to intercept NTU R-175. Thence . . .

. . .Via NTU R-175 to KITTE, arc south of NTU TACAN via the 49 mile arc to WYNNS. Cross RUDKE at or above 11,000. Cross KITTE at FL240 or as assigned. Thence . . .

RALEIGH-DURHAM TRANSITION (WYNNS2.RDU): Via RDU R-082 to RDU VORTAC.

WILMINGTON TRANSITION (WYNNS2.ILM): Via ILM R-034 to ILM VORTAC.

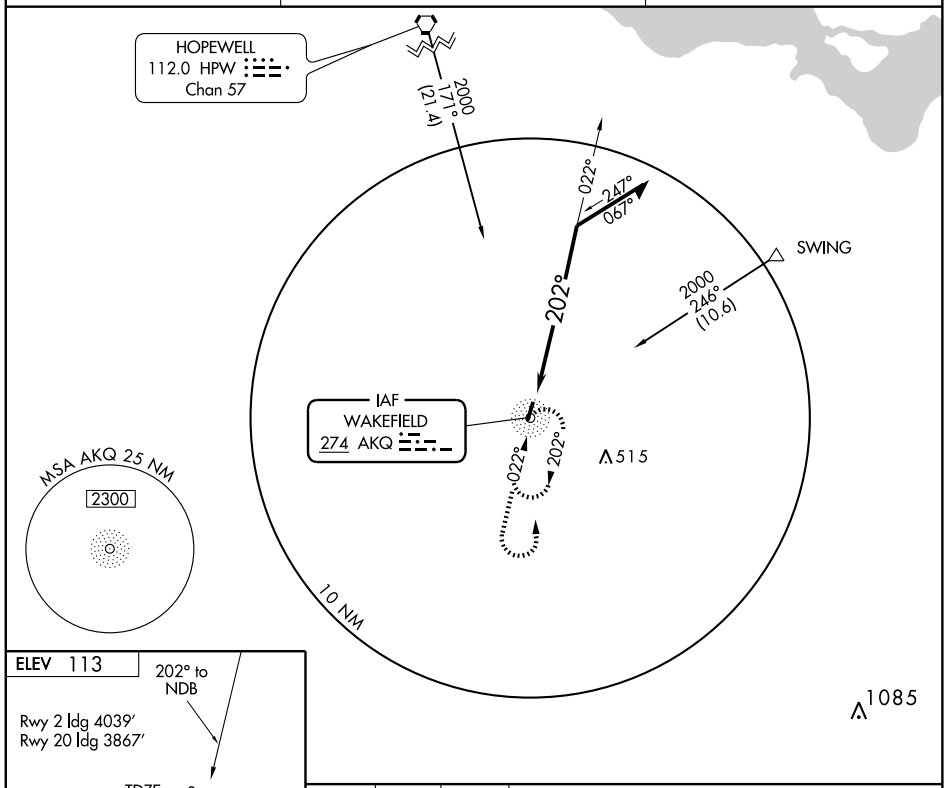
NDB AKQ	APP CRS	Rwy ldg	3867
274	202°	TDZE	113
		Apt Elev	113

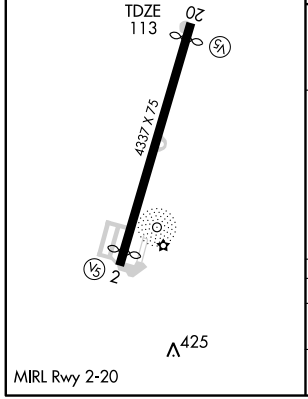
NDB RWY 20
WAKEFIELD MUNI (AKQ)

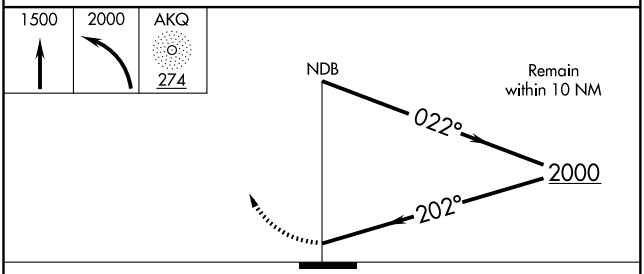
NA

MISSED APPROACH: Climb to 1500 then climbing left turn to 2000 direct AKQ NDB and hold.

ASOS	NORFOLK APP CON	UNICOM
128.325	127.9 269.42	122.8 (CTAF)







CATEGORY	A	B	C	D
S-20	840-1	727 (800-1)	840-2 727 (800-2)	840-2¼ 727 (800-2¼)
CIRCLING	840-1	727 (800-1)	840-2 727 (800-2)	840-2¼ 727 (800-2¼)

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3867
203°	TDZE	113
	Apt Elev	113

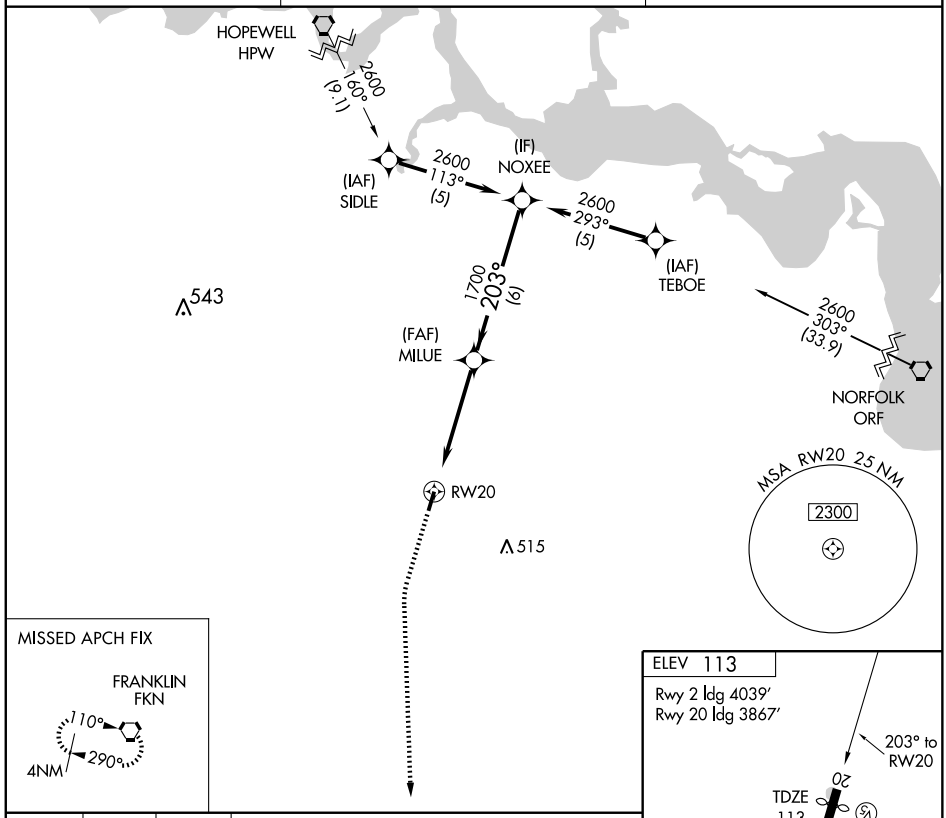
RNAV (GPS) RWY 20
WAKEFIELD MUNI (AKQ)

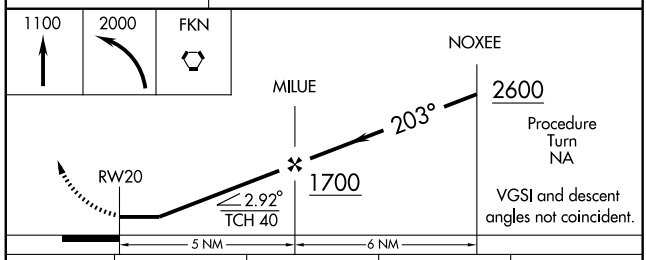
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

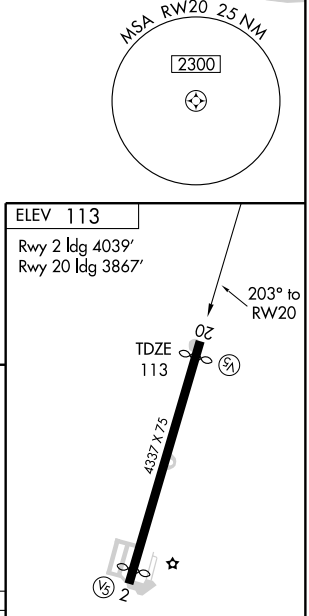
NA

MISSED APPROACH: Climb to 1100 then climbing left turn to 2000 direct FKN VORTAC and hold.

ASOS	NORFOLK APP CON		UNICOM
128.325	127.9	269.42	122.8 (CTAF)





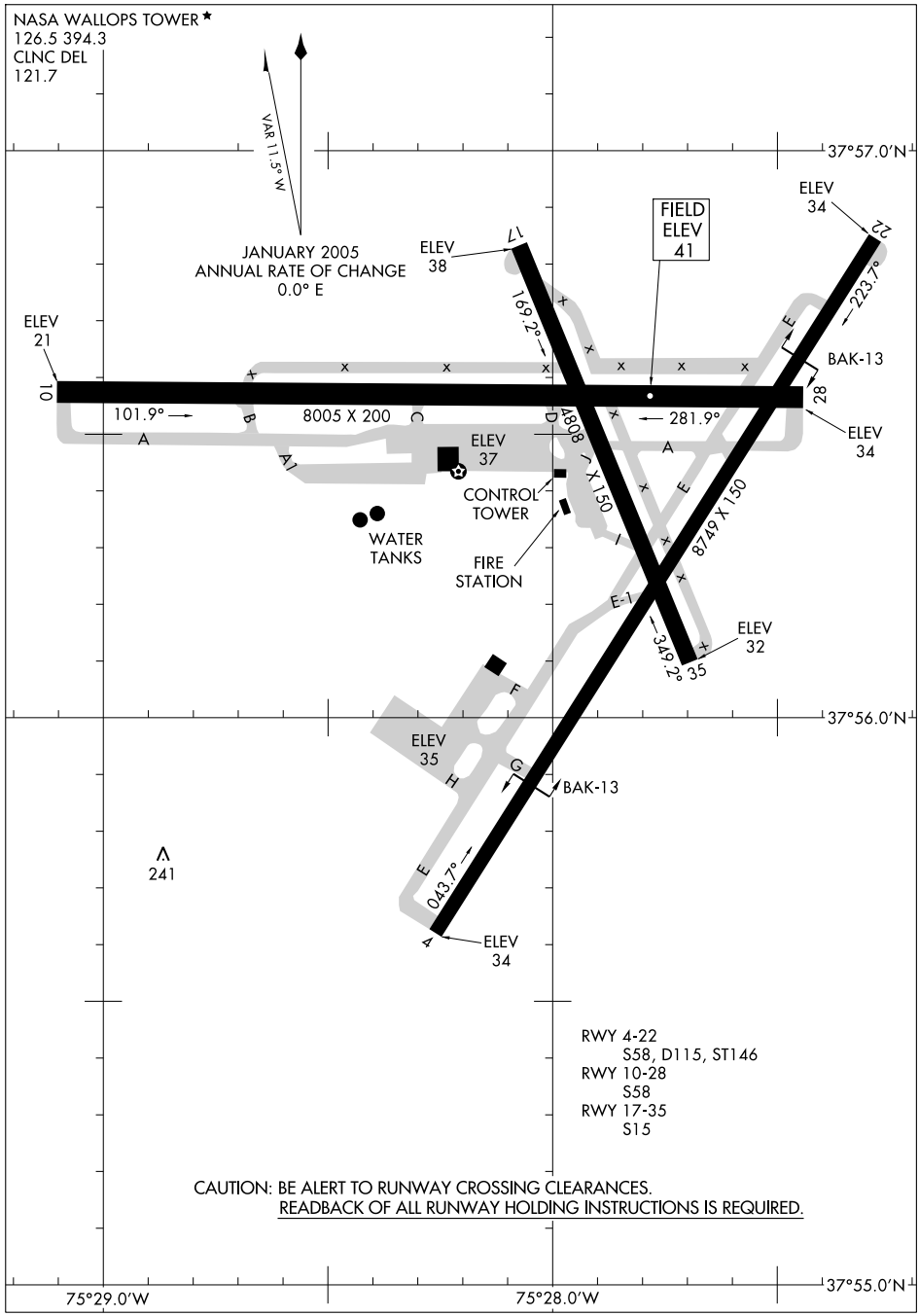


CATEGORY	A	B	C	D
LNAV MDA	600-1 487 (500-1)		600-1¼ 487 (500-1¼)	600-1½ 487 (500-1½)
CIRCLING	780-1 667 (700-1)		780-1¾ 667 (700-1¾)	780-2 667 (700-2)

AIRPORT DIAGRAM

AL-639 (FAA)

WALLOPS FLIGHT FACILITY (WAL)
WALLOPS ISLAND, VIRGINIA



NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	8749
042°	TDZE	36
	Apt Elev	40

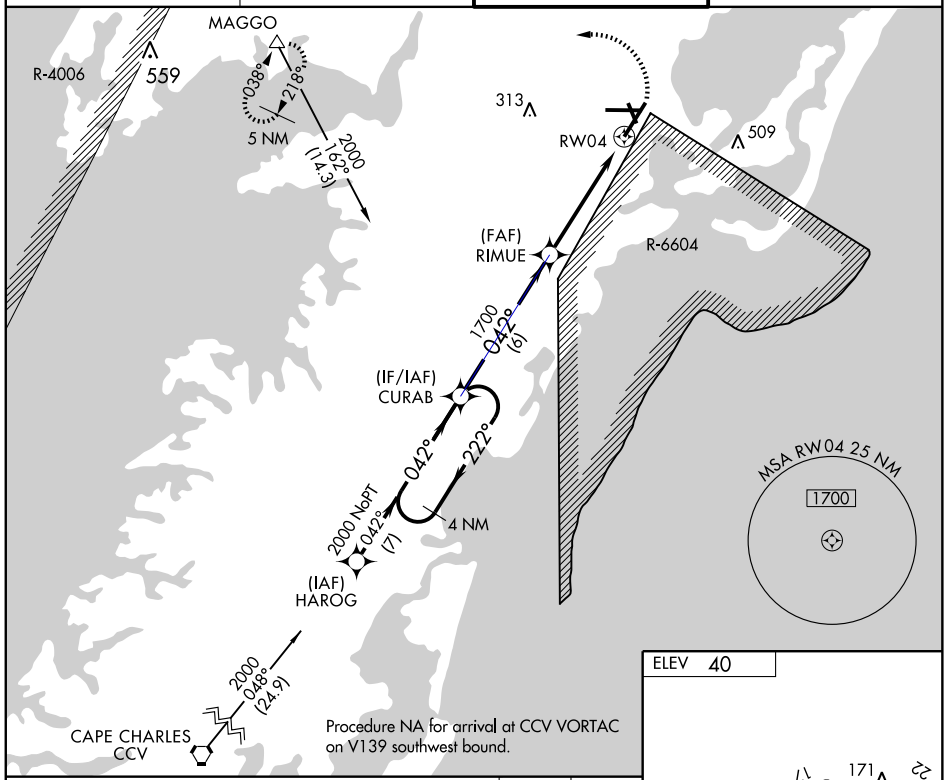
RNAV (GPS) RWY 4
WALLOPS FLIGHT FACILITY (WAL)

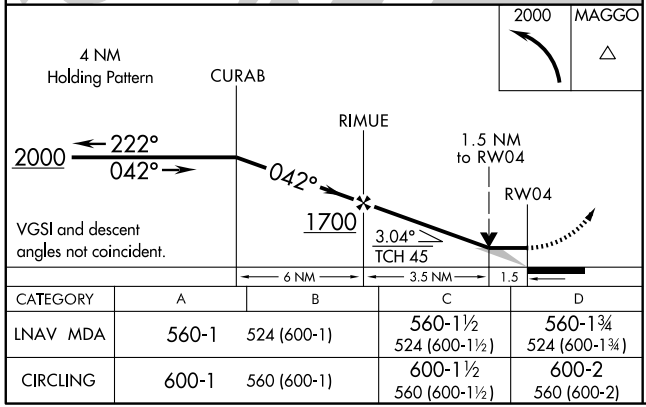
NA

Straight-in minimums NA at night.
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.

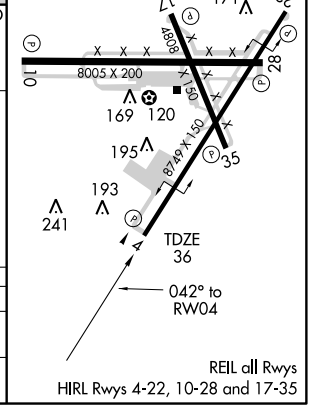
MISSED APPROACH: Climbing left turn to 2000 direct MAGGO WP and hold.

ASOS	PATUXENT APP CON*	NASA WALLOPS TOWER*	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7





CATEGORY	A	B	C	D
LNAV MDA	560-1	524 (600-1)	560-1½ 524 (600-1½)	560-1¾ 524 (600-1¾)
CIRCLING	600-1	560 (600-1)	600-1½ 560 (600-1½)	600-2 560 (600-2)



APP CRS	Rwy ldg	8005
112°	TDZE	38
	Apt Elev	40

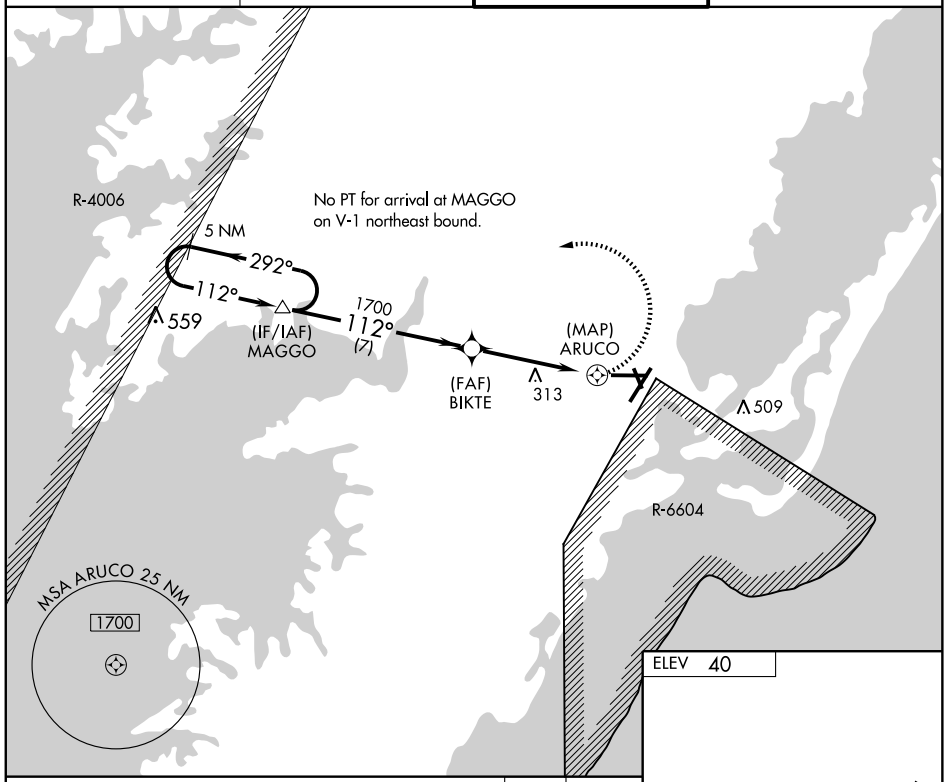
RNAV (GPS) RWY 10
WALLOPS FLIGHT FACILITY (WAL)

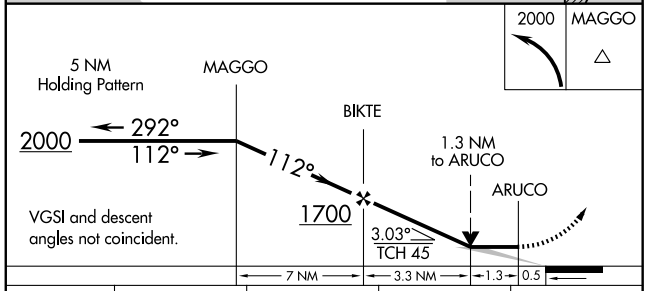
T
A NA

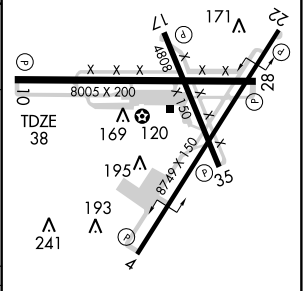
GPS or RNP -0.3 required.
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climbing left turn to 2000 direct MAGGO WP and hold.

ASOS	PATUXENT APP CON *	NASA WALLOPS TOWER *	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7







CATEGORY	A	B	C	D
LNAV MDA	640-1	602 (600-1)	640-1¾ 602 (600-1¾)	640-2 602 (600-2)
CIRCLING	640-1	600 (600-1)	640-1¾ 600 (600-1¾)	640-2 600 (600-2)

REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35

NE-3. 14 JAN 2010 to 11 FEB 2010

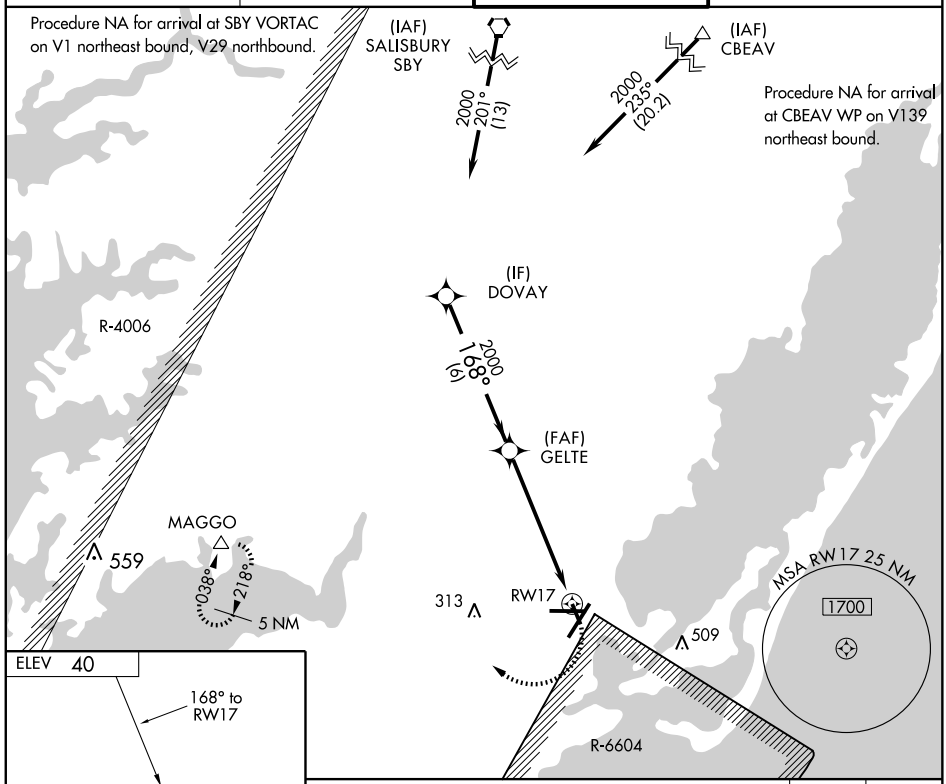
APP CRS	Rwy ldg	4808
168°	TDZE	39
	Apt Elev	40

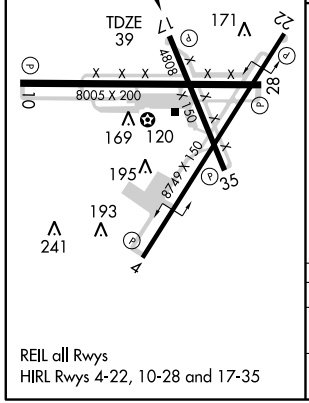
RNAV (GPS) RWY 17
WALLOPS FLIGHT FACILITY (WAL)

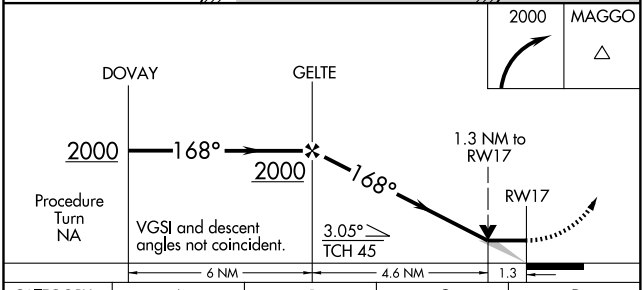
GPS or RNP -0.3 required.
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climbing right turn to 2000 direct MAGGO WP and hold.

ASOS	PATUXENT APP CON ★	NASA WALLOPS TOWER ★	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7







CATEGORY	A	B	C	D
LNAV MDA	480-1	441 (500-1)	480-1¼ 441 (500-1¼)	480-1½ 441 (500-1½)
CIRCLING	600-1	560 (600-1)	600-1½ 560 (600-1½)	600-2 560 (600-2)

REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	8749
222°	TDZE	36
	Apt Elev	40

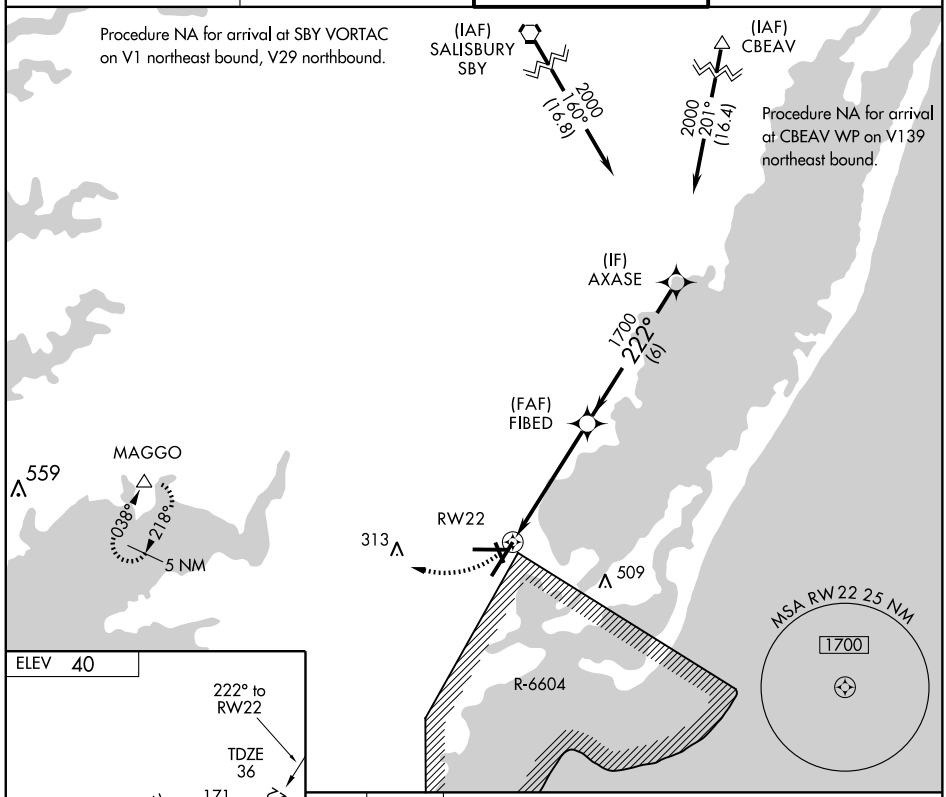
RNAV (GPS) RWY 22
WALLOPS FLIGHT FACILITY (WAL)

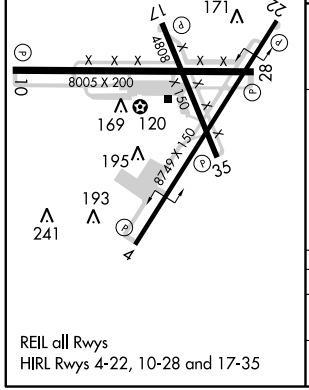
NA

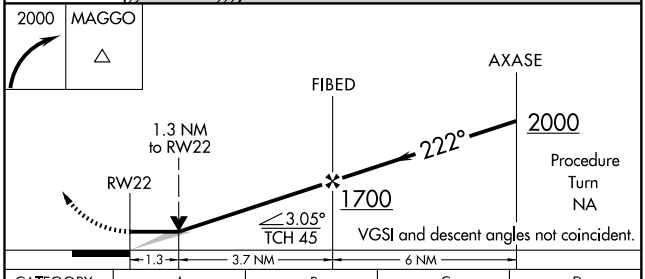
Straight-in minimums NA at night.
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.

MISSED APPROACH: Climbing right turn to 2000 direct MAGGO WP and hold.

ASOS	PATUXENT APP CON*	NASA WALLOPS TOWER*	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7







CATEGORY	A	B	C	D
LNAV MDA	480-1	444 (500-1)	480-1¼ 444 (500-1¼)	480-1½ 444 (500-1½)
CIRCLING	600-1	560 (600-1)	600-1½ 560 (600-1½)	600-2 560 (600-2)

REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35

APP CRS	Rwy ldg	8005
280°	TDZE	40
	Apt Elev	40

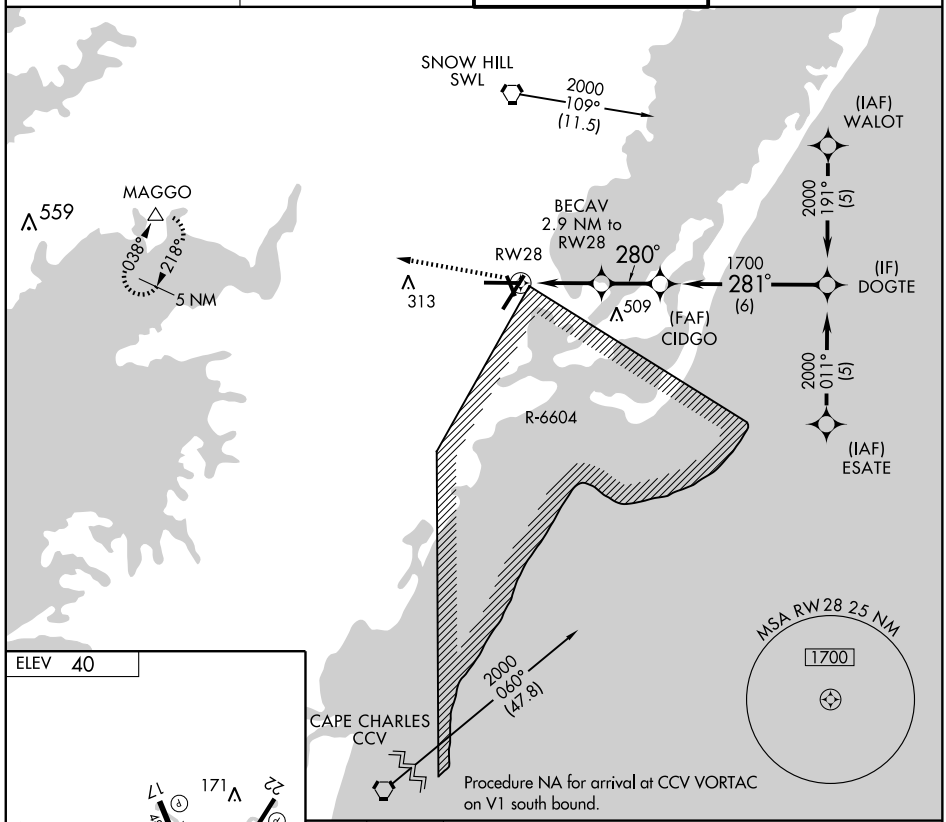
RNAV (GPS) RWY 28
WALLOPS FLIGHT FACILITY (WAL)

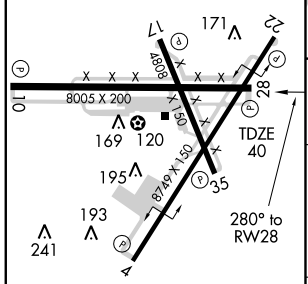
NA

Straight-in minimums NA at night.
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.

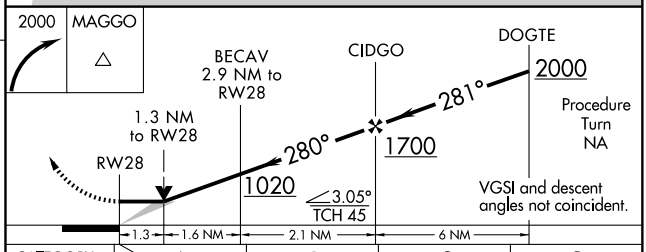
MISSED APPROACH: Climbing right turn to 2000 direct MAGGO WP and hold.

ASOS	PATUXENT APP CON *	NASA WALLOPS TOWER *	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7





REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35



CATEGORY	A	B	C	D
LNAV MDA	480-1	440 (500-1)	480-1¼ 440 (500-1¼)	480-1½ 440 (500-1½)
CIRCLING	600-1	560 (600-1)	600-1½ 560 (600-1½)	600-2 560 (600-2)

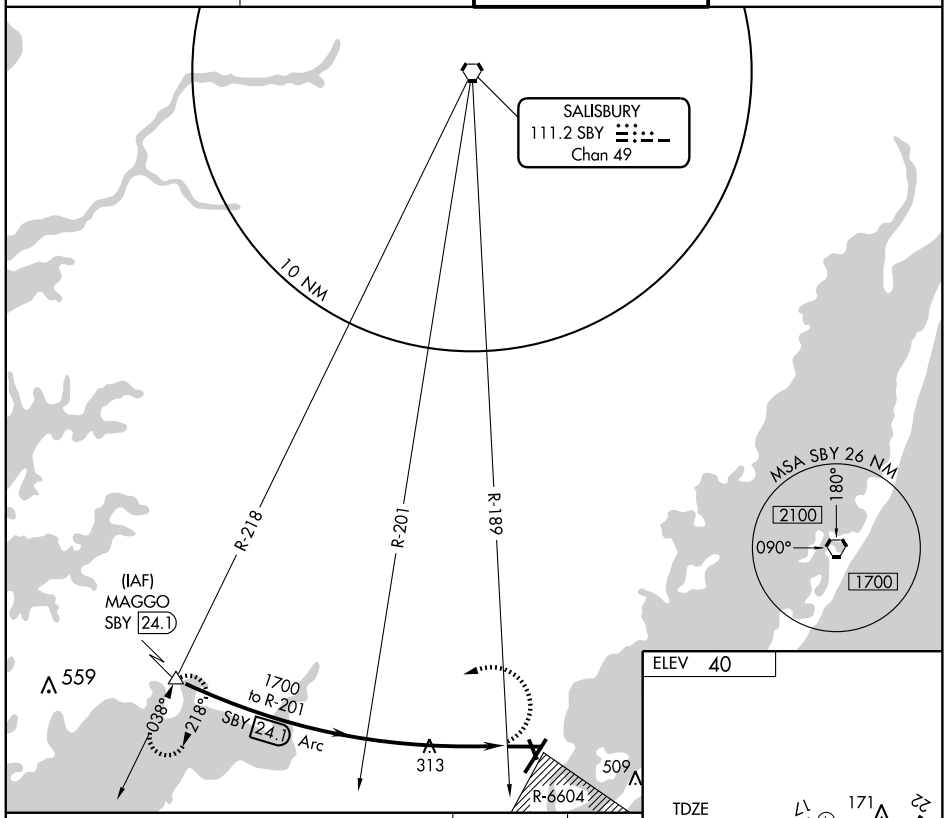
VORTAC SBY 111.2 Chan 49	APP CRS SBY 24.1 Arc	Rwy ldg 8005 TDZE 38 Apt Elev 40

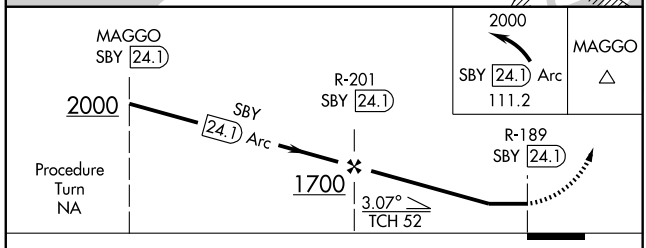
VOR/DME or TACAN RWY 10

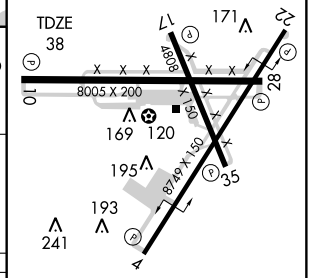
WALLOPS FLIGHT FACILITY (WAL)

MISSED APPROACH: Climbing left turn to 2000 via the SBY 24.1 DME Arc clockwise to MAGGO/SBY R-218 24.1 DME and hold.

ASOS	PATUXENT APP CON *	NASA WALLOPS TOWER *	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7







CATEGORY	A	B	C	D
S-10	900-1 862 (900-1)	900-1¼ 862 (900-1¼)	900-2½ 862 (900-2½)	900-2¾ 862 (900-2¾)
CIRCLING	900-1 860 (900-1)	900-1¼ 860 (900-1¼)	900-2½ 860 (900-2½)	900-2¾ 860 (900-2¾)

REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35

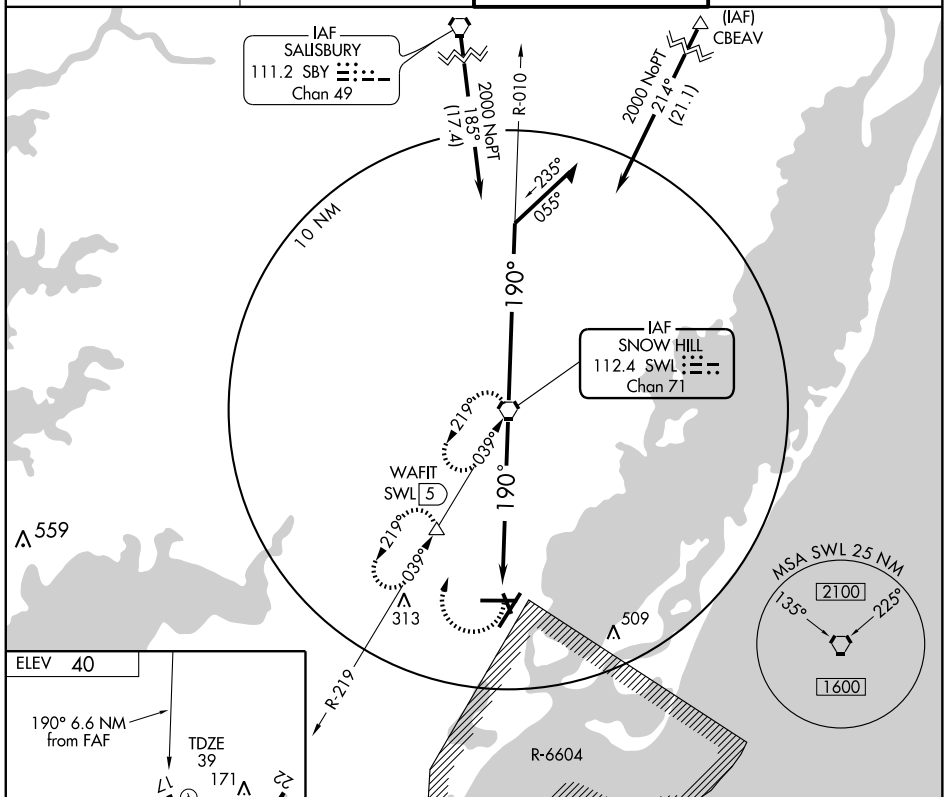
VORTAC SWL 112.4 Chan 71	APP CRS 190°	Rwy ldg 4808 TDZE 39 Apt Elev 40

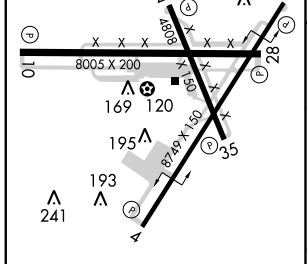
VOR or TACAN RWY 17

WALLOPS FLIGHT FACILITY (WAL)

MISSED APPROACH: Climbing right turn to 2000 direct SWL VORTAC and hold. (TACAN aircraft climbing right turn via SWL R-219 to WAFIT/SWL 5 DME and hold SW, left turn 039° inbound.)

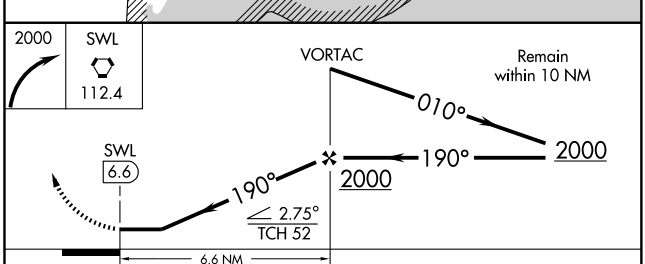
ASOS	PATUXENT APP CON ★	NASA WALLOPS TOWER ★	CLNC DEL
119.175	127.95 314.0	126.5 394.3	121.7





REIL all Rwys
HIRL Rwys 4-22, 10-28 and 17-35

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D
S-17	500-1 461 (500-1)		500-1¼ 461 (500-1¼)	NA
CIRCLING	600-1 560 (600-1)		600-1½ 560 (600-1½)	600-2 560 (600-2)

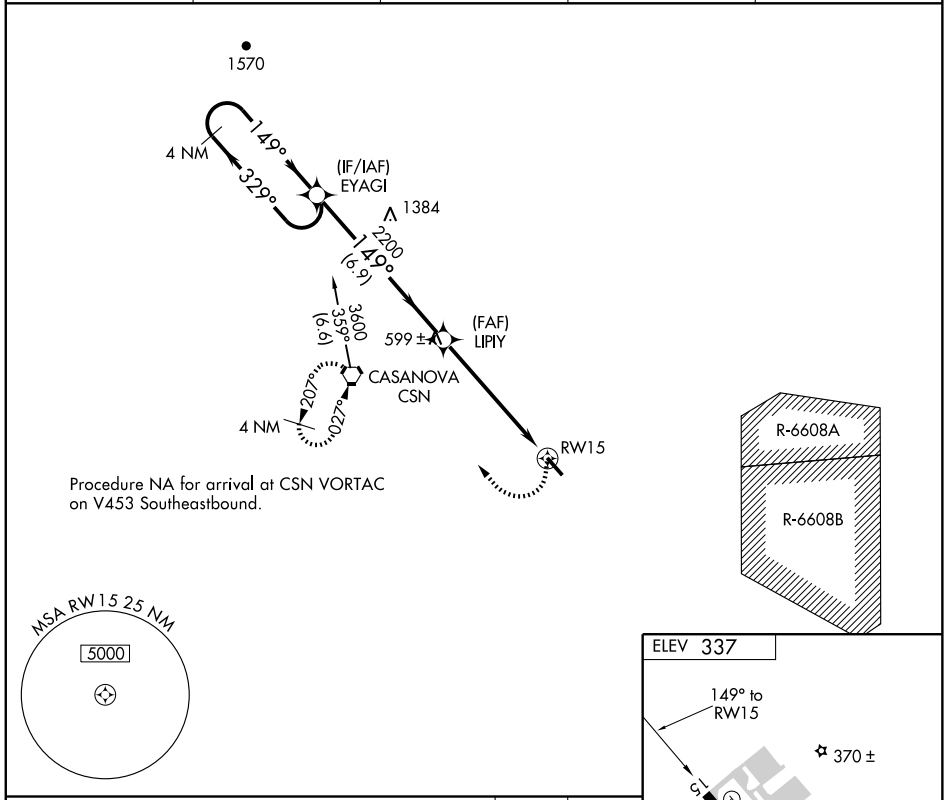
APP CRS	Rwy ldg	5000
149°	TDZE	328
	Apt Elev	337

RNAV (GPS) RWY 15
WARRENTON-FAUQUIER (HWY)

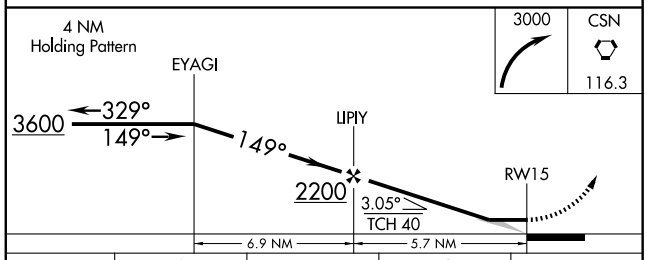
NA DME/DME RNP-0.3 NA. Use Culpeper Rgnl altimeter setting, if not received, use Manassas Rgnl/Harry P Davis Field altimeter setting and increase all MDAs 40 feet.

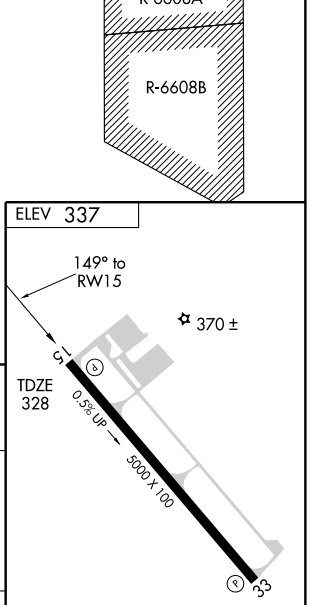
MISSED APPROACH: Climbing right turn to 3000 direct CSN VORTAC and hold.

ASOS	CULPEPER AWOS-3	POTOMAC APP CON	CLNC DEL (GCO)	UNICOM
120.350	119.325	124.65 306.925	135.075	122.7 (CTAF) L



Procedure NA for arrival at CSN VORTAC on V453 Southeastbound.





CATEGORY	A	B	C	D
LNAV MDA	780-1 452 (500-1)		780-1¼ 452 (500-1¼)	780-1½ 452 (500-1½)
CIRCLING	780-1 443 (500-1)	800-1 463 (500-1)	800-1½ 463 (500-1½)	900-2 563 (600-2)

REIL Rwys 15 and 33
HIRL Rwy 15-33 L

NE-3. 14 JAN 2010 to 11 FEB 2010

VORTAC CSN	APP CRS	Rwy ldg	5000
116.3	119°	TDZE	327
Chan 110		Apt Elev	337

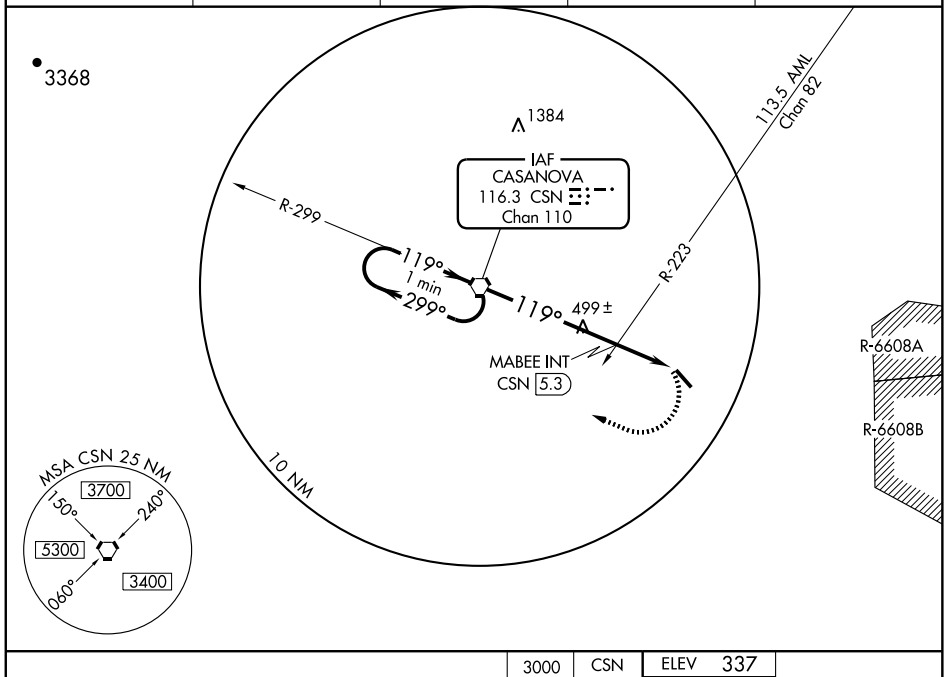
VOR RWY 15
WARRENTON-FAUQUIER (HWY)

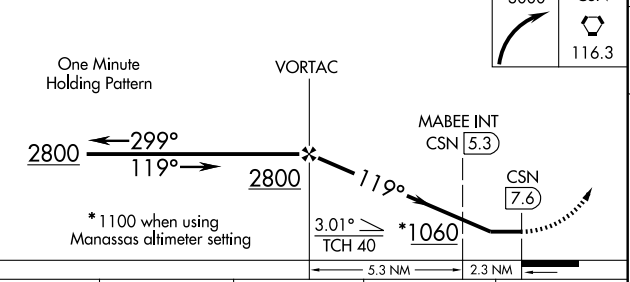
Use Culpeper Rgnl altimeter setting, if not received, use Manassas Rgnl/Harry P Davis Field altimeter setting and increase all MDAs 40 feet.

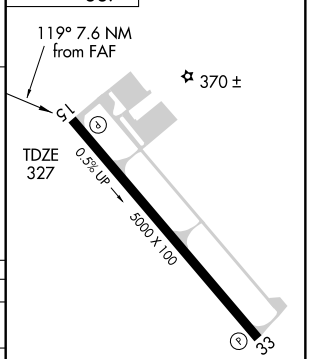
NA

MISSED APPROACH: Climbing right turn to 3000 direct to CSN VORTAC and hold.

ASOS	CULPEPER AWOS-3	POTOMAC APP CON	CLNC DEL (GCO)	UNICOM
120.350	119.325	124.65 306.925	135.075	122.7 (CTAF) L







REIL Rwys 15 and 33
HIRL Rwy 15-33 L

CATEGORY	A	B	C	D
S-15	1060-1 732 (800-1)		1060-2 732 (800-2)	1060-2¼ 732 (800-2¼)
CIRCLING	1060-1 723 (800-1)		1060-2 723 (800-2)	1060-2¼ 723 (800-2¼)
MABEE FIX MINIMUMS				
S-15	740-1	412 (500-1)	740-1¼	412 (500-1¼)
CIRCLING	740-1 403 (500-1)	800-1 463 (500-1)	800-1½ 463 (500-1½)	900-2 563 (600-2)

FAF to MAP 7.6 NM

Knots	60	90	120	150	180
Min:Sec	7:36	5:04	3:48	3:02	2:32

NE-3. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5000
097°	TDZE	13
	Apt Elev	21

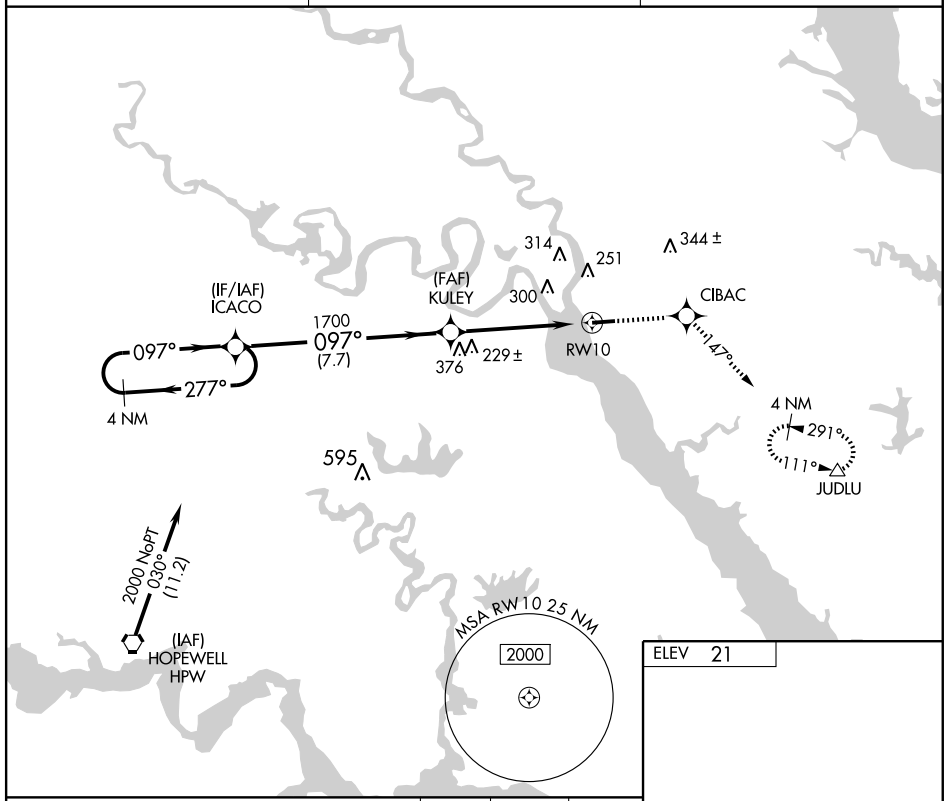
RNAV (GPS) RWY 10

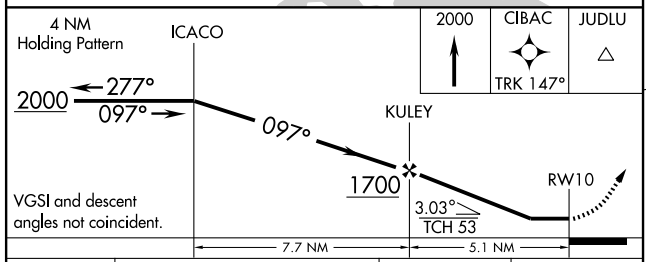
WEST POINT/MIDDLE PENINSULA RGNL (FYJ)

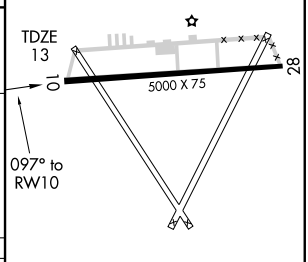
When local altimeter setting not received, use Newport News altimeter setting and increase all MDAs 80 feet, increase LNAV Cat C visibility ¼ mile, and Circling Cat C visibility ½ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 direct CIBAC and via 147° track to JUDLU and hold.

AWOS-3	POTOMAC APP CON	UNICOM
132.825	126.4 282.375	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	480-1 467 (500-1)		NA	NA
CIRCLING	480-1 459 (500-1)	560-1 539 (600-1)	620-1½ 599 (600-1½)	NA

MIRL Rwy 10-28 L

VORTAC HCM	APP CRS	Rwy ldg	N/A
108.8	337°	TDZE	N/A
Chan 25		Apt Elev	21

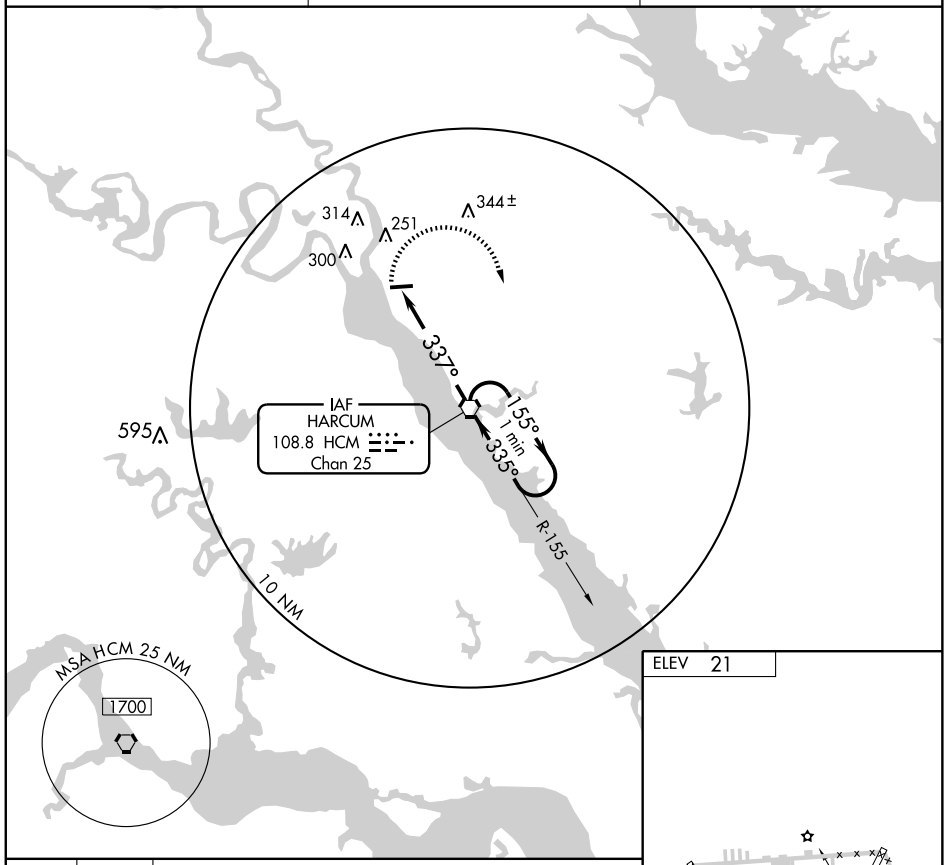
VOR-A

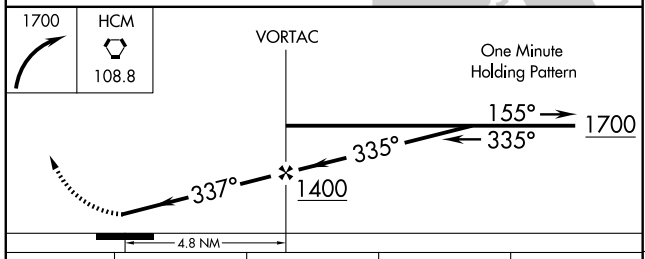
WEST POINT/MIDDLE PENINSULA RGNL (FYJ)

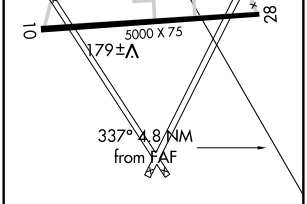
When local altimeter setting not received, use Newport News altimeter setting and increase all MDAs 80 feet and Cat C visibility ½ mile.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 1700 direct HCM VORTAC and hold.

AWOS-3	POTOMAC APP CON	UNICOM
132.825	126.4 282.375	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	480-1 459 (500-1)	560-1 539 (600-1)	620-1½ 599 (600-1½)	NA

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

NE-3, 14 JAN 2010 to 11 FEB 2010

VORTAC HCM 108.8 Chan 25	APP CRS 188°	Rwy ldg N/A TDZE N/A Apt Elev 49

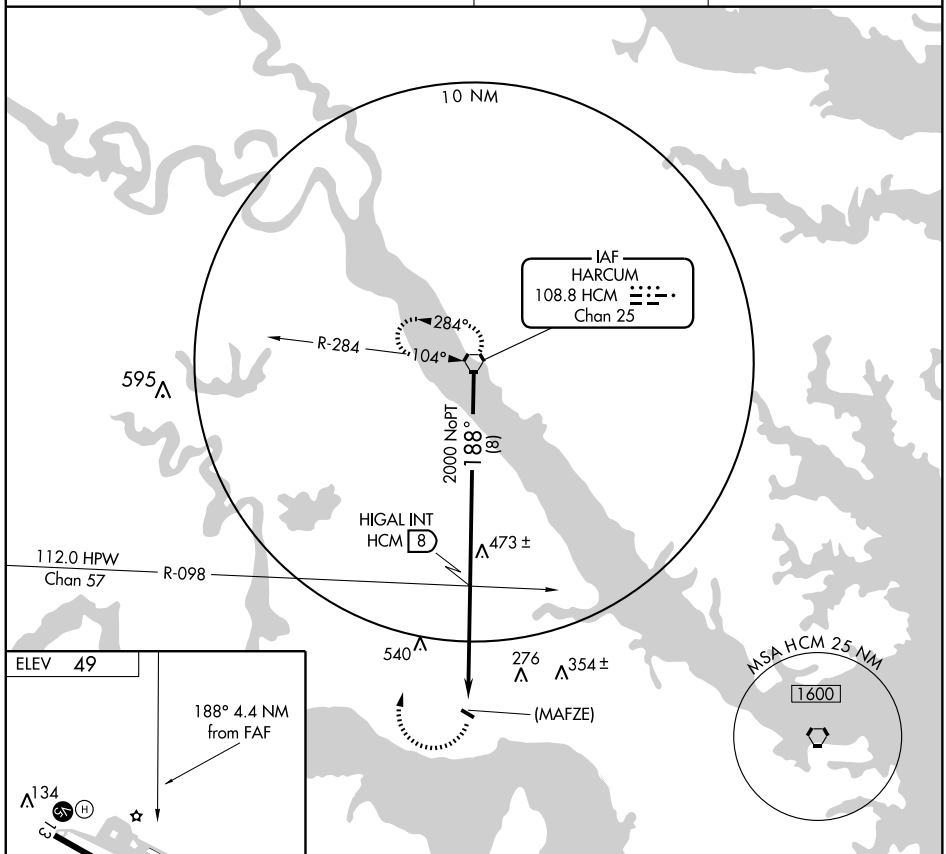
VOR or GPS-B
WILLIAMSBURG-JAMESTOWN (JGG)

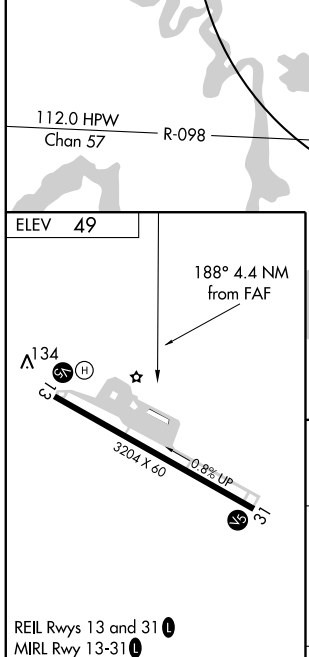
Use Newport News/Williamsburg Intl altimeter setting.

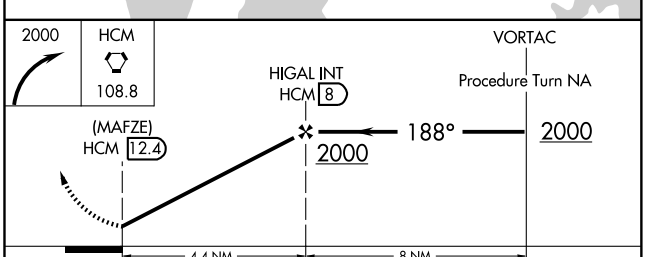
NA

MISSED APPROACH: Climbing right turn to 2000 direct HCM VORTAC and hold.

AWOS-3	NORFOLK APP CON	GCO	UNICOM
120.625	119.45 360.6	135.075	122.8 (CTAF) L







FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
CIRCLING	680-1 631 (700-1)		680-1¾ 631 (700-1¾)	NA

RNAV (GPS) RWY 5

APCH CRS	Rwy ldg	5018
050°	TDZE	41
	Arpt Elev	41

AL-3214 [USA]

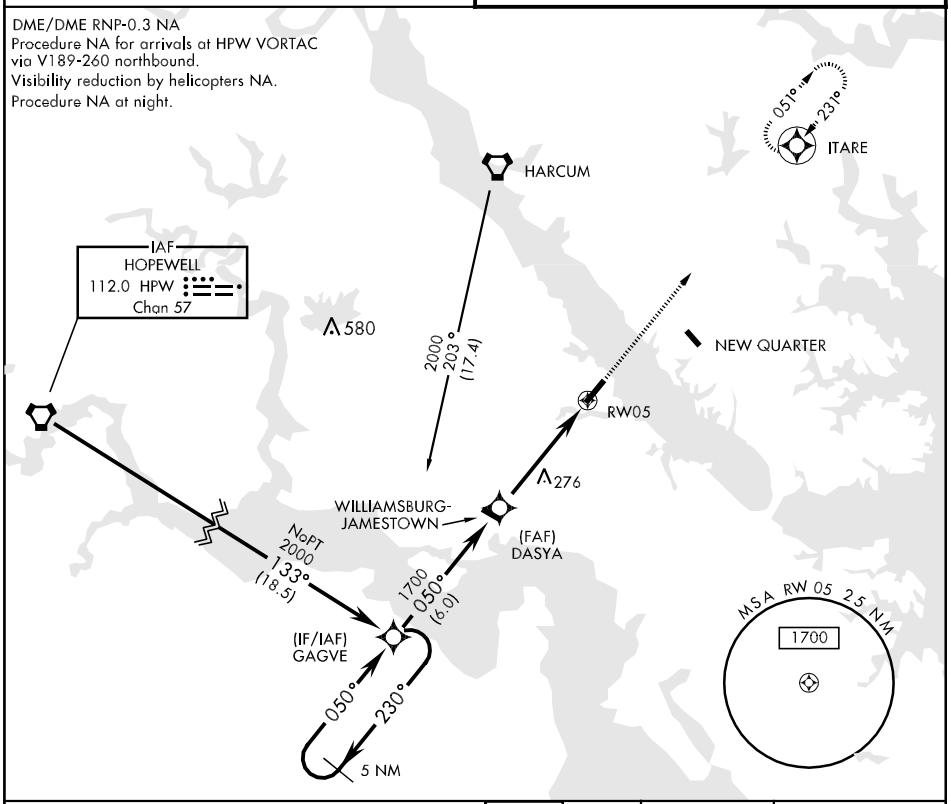
CAMP PEARY LNDG STRIP (KW94)

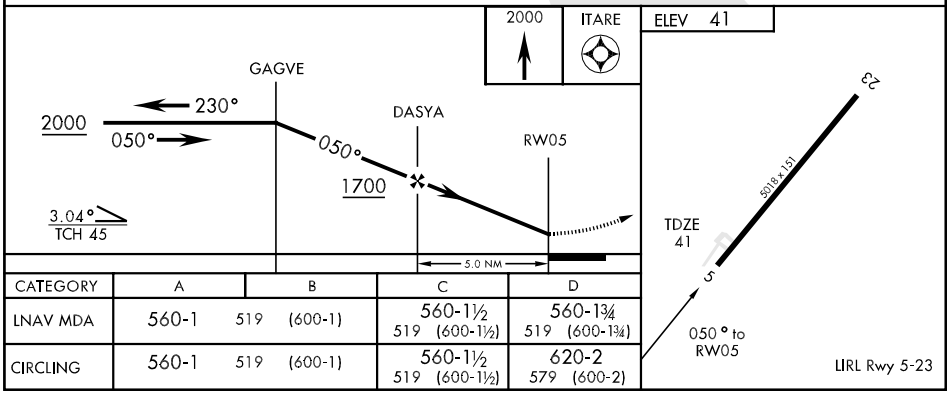
Use Williamsburg-Jamestown altimeter setting. When not received,use Newport News/ Williamsburg Intl altimeter setting and increase all MDAs 20 feet and increase LNAV CAT C and D vis ¼ mile. Restricted airfield, PPR. Contact Camp Peary Ops prior to landing.

MISSED APPROACH: Climb to 2000 direct ITARE and hold.

WILLIAMSBURG-JAMESTOWN AWOS-3	NORFOLK APP CON
120.625	125.7 335.625

DME/DME RNP-0.3 NA
Procedure NA for arrivals at HPW VORTAC via V189-260 northbound.
Visibility reduction by helicopters NA.
Procedure NA at night.





CATEGORY	A	B	C	D
LNAV MDA	560-1 519 (600-1)		560-1½ 519 (600-1½)	560-1¾ 519 (600-1¾)
CIRCLING	560-1 519 (600-1)		560-1½ 519 (600-1½)	620-2 579 (600-2)

LIRL Rwy 5-23

RNAV (GPS) RWY 23

APCH CRS	Rwy ldg	5018
230°	TDZE	34
	Arpt Elev	41

AL-3214 [USA]

CAMP PEARY LNDG STRIP (KW94)

Use Williamsburg-Jamestown altimeter setting. When not received, use Newport News/ Williamsburg Intl altimeter setting and increase all MDAs 20 feet and increase LNAV CAT C vis ¼ mile. Restricted airfield, PPR. Contact Camp Peary Ops prior to landing.

MISSED APPROACH: Climb to 2000 direct GAGVE and hold.

WILLIAMSBURG-JAMESTOWN AWOS-3	NORFOLK APP CON
120.625	125.7 335.625

DME/DME RNP-0.3 NA
Procedure NA for arrivals at CCV VORTAC via V286 southeast bound.
Visibility reduction by helicopters NA.
Procedure NA at night.

5 NM
051°
231°
HARCUM
2000
097°
(10.8)
1700
231°
(6.0)
(IF/IAF)
ITARE
NoPT
2000
297°
(24.3)
IAF
CAPE CHARLES
112.2 CCV
Chan 59
230°
(FAF)
FASPU
NEW QUARTER
580
RW23
146
WILLIAMSBURG-
JAMESTOWN
MSA RW 23 2.5 NM
1700
GAGVE
051°
231°

2000
GAGVE
ITARE
FASPU
051°
2000
231°
231°
RW23
230°
1700
3.05°
TCH 45
5.0 NM

ELEV 41
230° to RW23
23
TDZE
34
5018 x 151
5

CATEGORY	A	B	C	D
LNAV MDA	420-1 386 (400-1)			420-1¼ 386 (400-1¼)
CIRCLING	500-1 459 (500-1)		500-1½ 459 (500-1½)	620-2 579 (600-2)

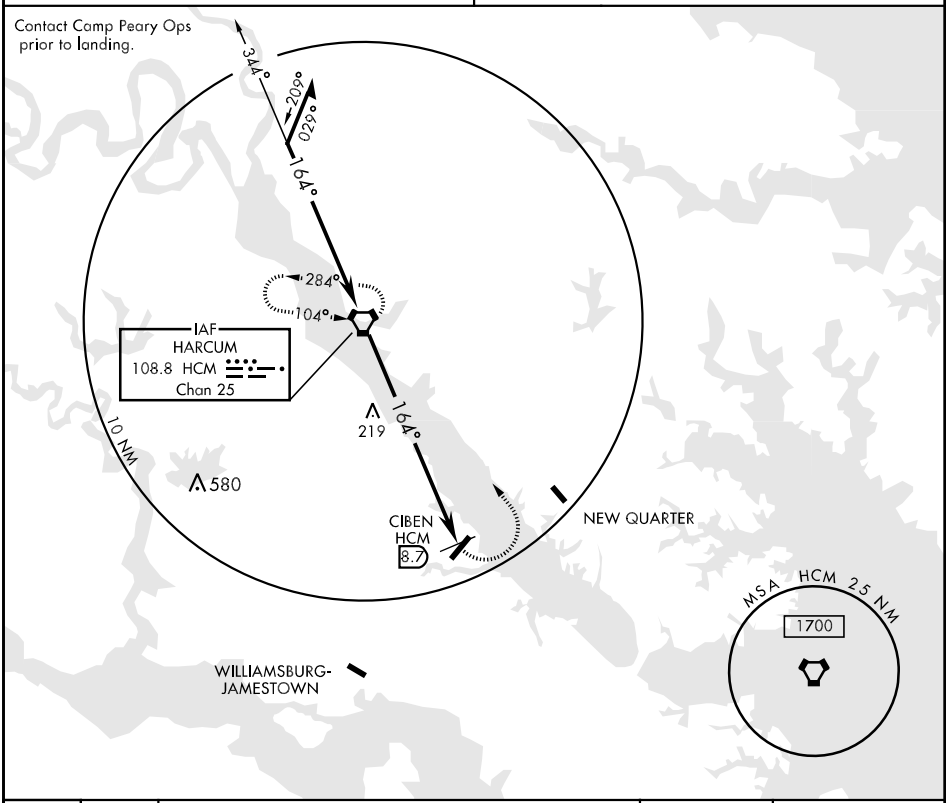
LIRL Rwy 5-23

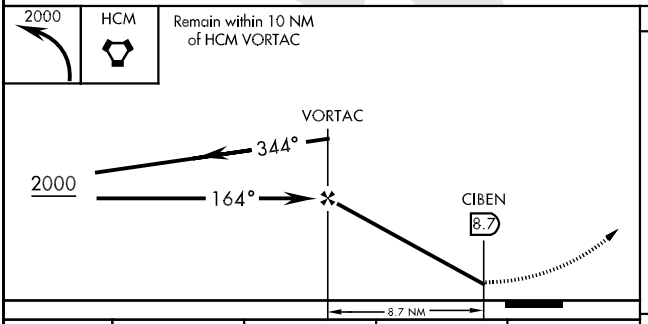
VORTAC HCM 108.8 Chan 25	APCH CRS 164°	Rwy ldg NA TDZE NA Arpt Elev 41	AL-3214 [USA]	CAMP PEARY LNDG STRIP (KW94)

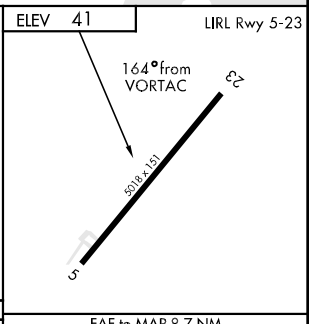
T *Circling to Rwy 23 NA at night.
Use Williamsburg-Jamestown altimeter setting. When not received, use Newport News/ Williamsburg Intl altimeter setting and increase all MDAs 20 feet. Restricted airfield, PPR.

MISSED APPROACH: Climbing left turn to 2000 direct HCM VORTAC and hold.

WILLIAMSBURG-JAMESTOWN AWOS-3	NORFOLK APP CON
120.625	125.7 335.625







CATEGORY	A	B	C	D
CIRCLING *	620-1 579 (600-1)		620-1½ 579 (600-1½)	620-2 579 (600-2)

FAF to MAP 8.7 NM					
Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

LOC/DME I-TZX 109.55 Chan 32 (Y)	APP CRS 324°	Rwy ldg 5500 TDZE 715 Apt Elev 726

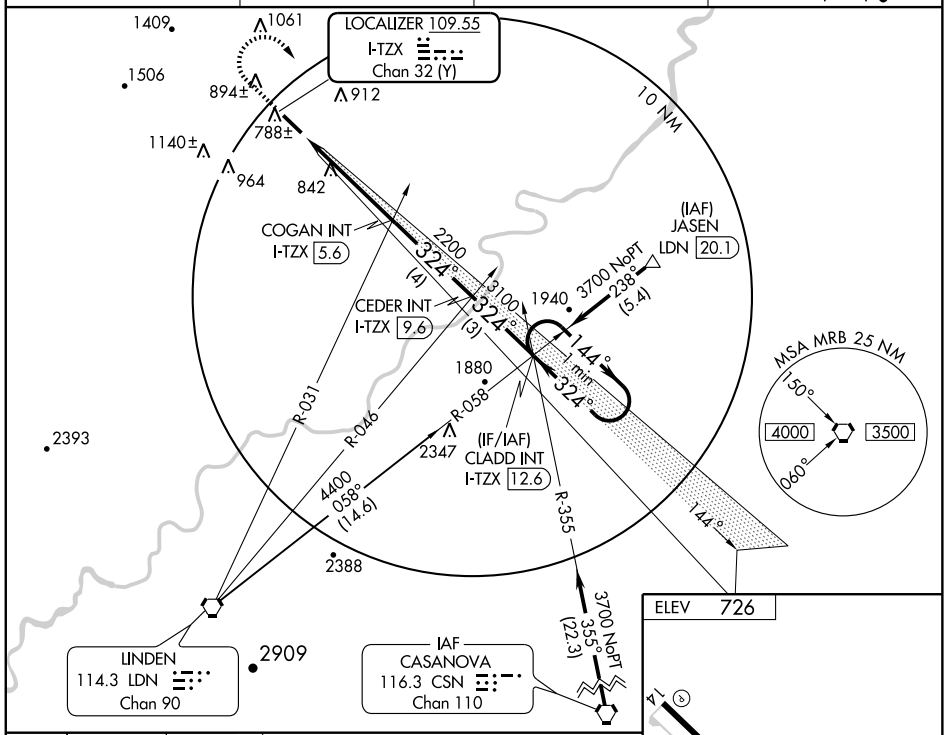
ILS or LOC RWY 32
WINCHESTER RGNL (OKV)

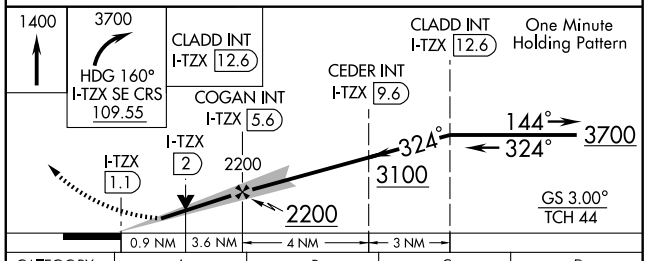
NA — Visibility reduction by helicopters NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 63 feet and all MDA 80 feet and Circling Cat C visibility ¼ mile. For inoperative MALSR, increase S-LOC 32 Cat C visibility to 1 mile. For inoperative MALSR when using Martinsburg altimeter setting, increase S-ILS 32 All Cats visibility ½ mile. VDP NA when using Martinsburg altimeter setting.

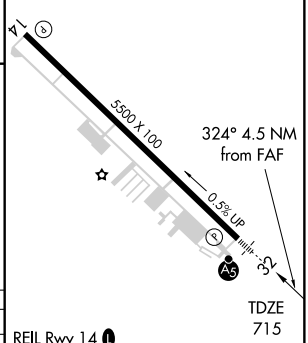
MALSR

MISSED APPROACH: Climb to 1400 then climbing right turn to 3700 via heading 160° and I-TZX SE course to CLADD Int/I-TZX 12.6 DME and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.85	120.45 306.925	126.15	122.7 (CTAF) L







REIL Rwy 14 L
MIRL Rwy 14-32 L

CATEGORY	A	B	C	D
S-ILS 32	915-½ 200 (200-½)			
S-LOC 32	1040-½ 325 (400-½)			1040-¾ 325 (400-¾)
CIRCLING	1120-1 394 (400-1)	1260-1 534 (600-1)	1260-1½ 534 (600-1½)	1280-2 554 (600-2)

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

NE-3, 14 JAN 2010 to 11 FEB 2010

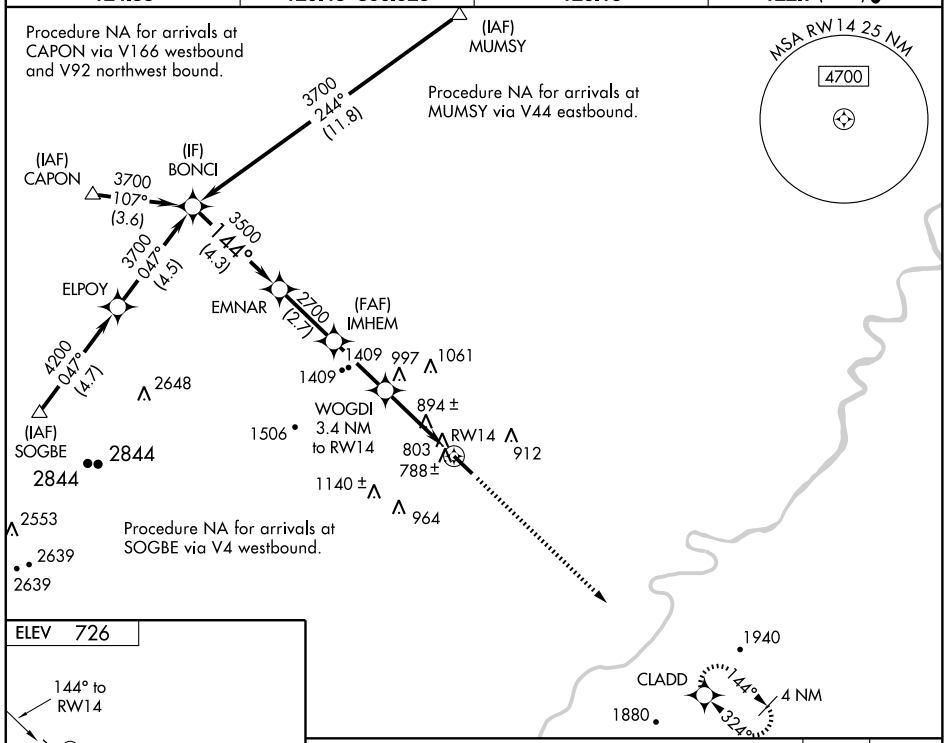
WAAS CH 70712 W14A	APP CRS 144°	Rwy ldg 5500 TDZE 726 Apt Elev 726

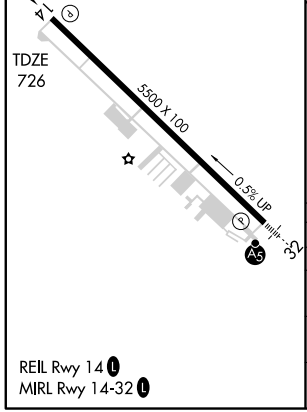
RNAV (GPS) RWY 14
WINCHESTER RGNL (OKV)

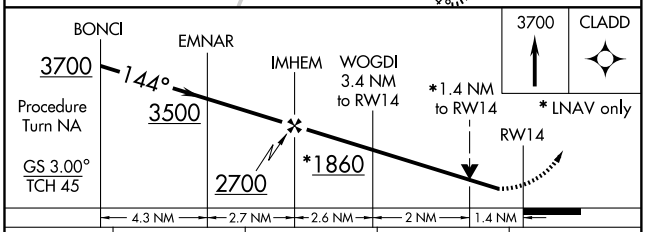
Baro-VNAV NA when using Martinsburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 63 feet and all MDA 80 feet and increase LNAV/VNAV all Cats, LNAV Cats C and D, and Circling Cat C visibilities ¼ mile.
VDP NA when using Martinsburg altimeter setting.

MISSED APPROACH: Climb to 3700 direct CLADD and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.85	120.45 306.925	126.15	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1049-1¼ 323 (400-1¼)			
LNAV/ VNAV DA	1073-1¼ 347 (400-1¼)			
LNAV MDA	1200-1 474 (500-1)		1200-1¼ 474 (500-1¼)	1200-1½ 474 (500-1½)
CIRCLING	1200-1 474 (500-1)	1260-1 534 (600-1)	1260-1½ 534 (600-1½)	1280-2 554 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

WAAS CH 97512 W32A	APP CRS 324°	Rwy ldg 5500 TDZE 715 Apt Elev 726

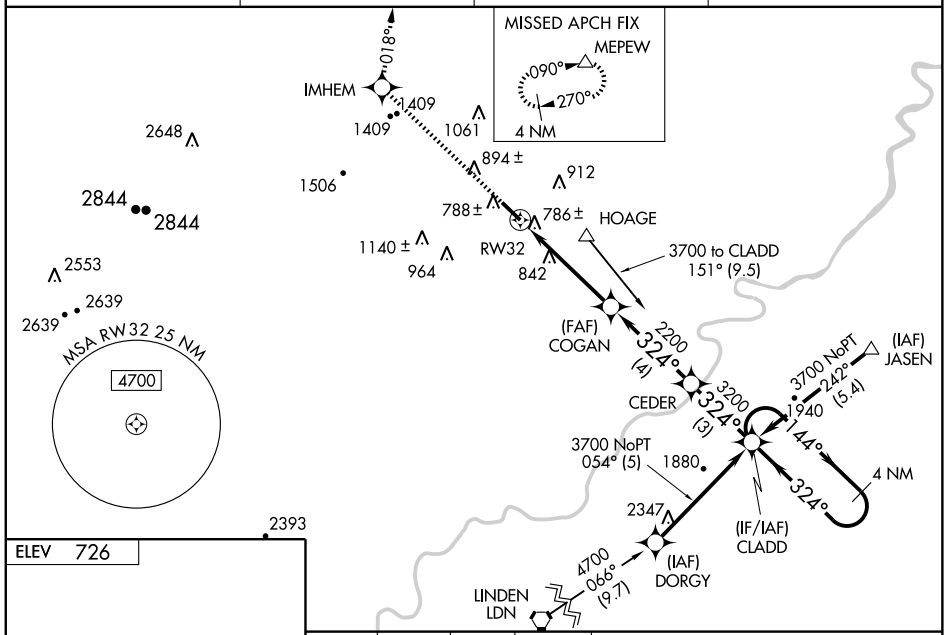
RNAV (GPS) RWY 32
WINCHESTER RGNL (OKV)

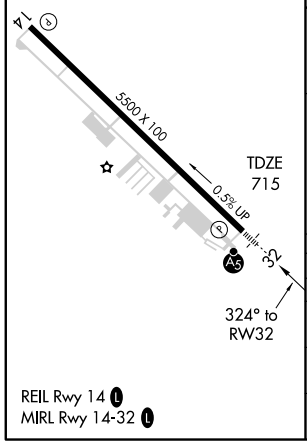
Baro-VNAV NA when using Martinsburg altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase all DA 63 feet and all MDA 80 feet, and LNAV/VNAV all Cats and Circling Cat C visibility ¼ mile. For inoperative MALSR, increase LNAV Cats A, B and C visibility to 1 mile and LNAV Cat D visibility to 1¼ mile. Inoperative table does not apply to LPV. For inoperative MALSR when using Martinsburg altimeter setting, increase LPV all Cats and LNAV Cats A and B visibility to 1 mile. VDP NA when using Martinsburg altimeter setting.

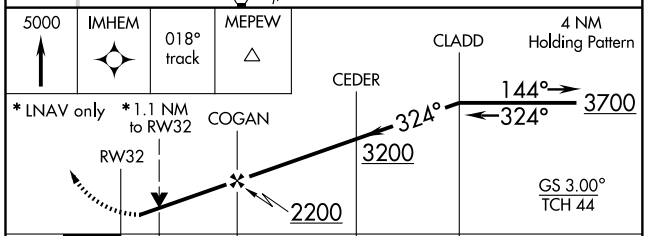
MALSR

MISSED APPROACH: Climb to 5000 direct IMHEM and via track 018° to MEPEW and hold, continue climb-in-hold to 5000.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.85	120.45 306.925	126.15	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	915-¾ 200 (200-¾)			
LNAV/ VNAV DA	1056-¾ 341 (400-¾)			
LNAV MDA	1100-¾ 385 (400-¾)			1100-1 385 (400-1)
CIRCLING	1120-1 394 (400-1)	1260-1 534 (600-1)	1260-1½ 534 (600-1½)	1280-2 554 (600-2)

NE-3. 14 JAN 2010 to 11 FEB 2010

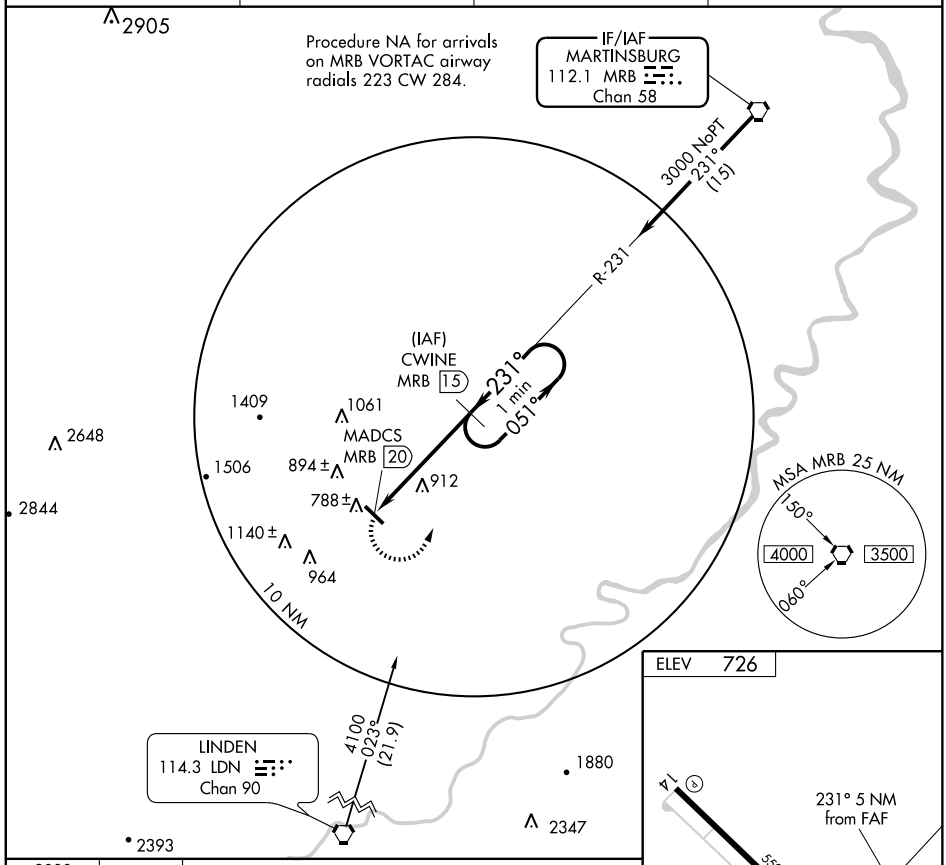
VORTAC MRB 112.1 Chan 58	APP CRS 231°	Rwy ldg N/A TDZE N/A Apt Elev 726

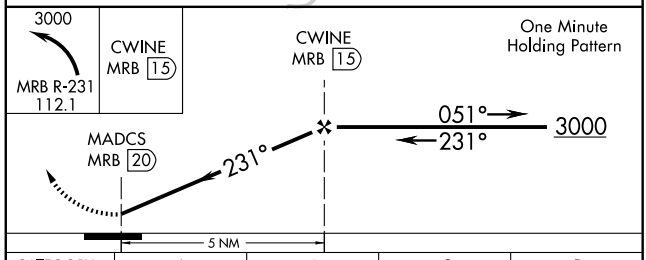
VOR/DME-A
WINCHESTER RGNL (OKV)

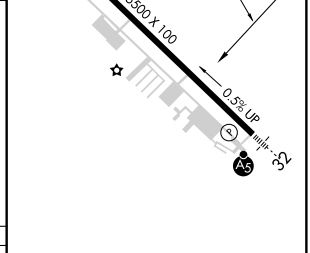
When local altimeter setting not received, use Martinsburg altimeter setting and increase all MDA 80 feet and Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 via MRB R-231 to CWINE/MRB 15 DME and hold, continue climb-in-hold to 3000.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.85	120.45 306.925	126.15	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1180-1 454 (500-1)	1260-1¼ 534 (600-1¼)	1260-1½ 534 (600-1½)	1280-2 554 (600-2)

REIL Rwy 14 L
MIRL Rwy 14-32 L

NE-3, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5280
066°	TDZE	2671
	Apt Elev	2684

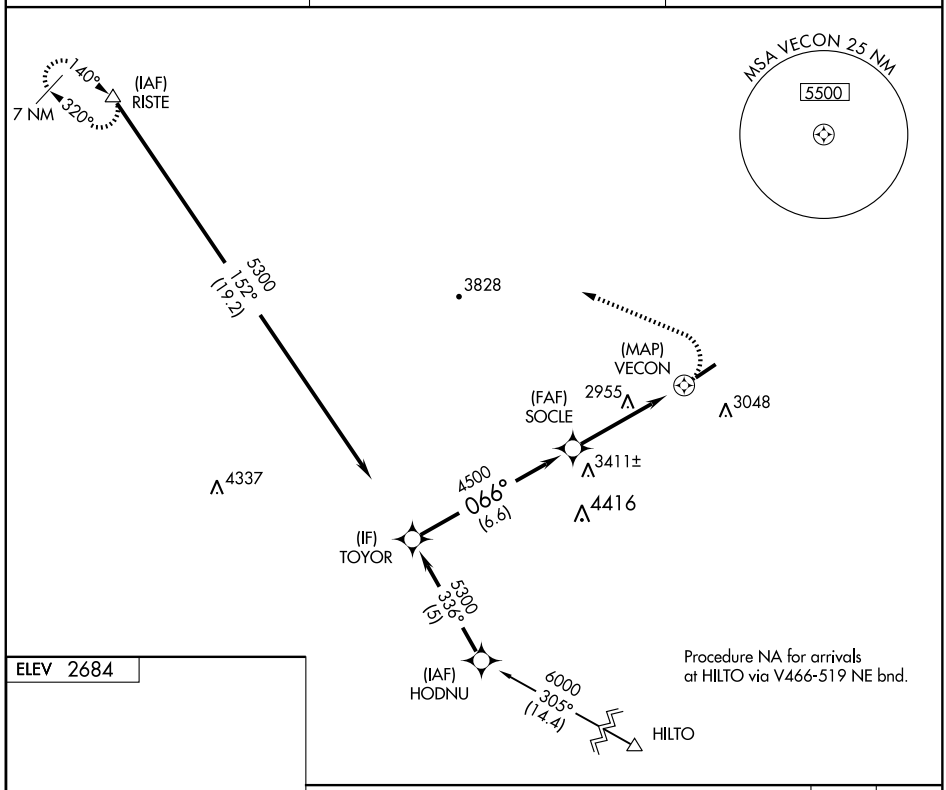
RNAV (GPS) RWY 6

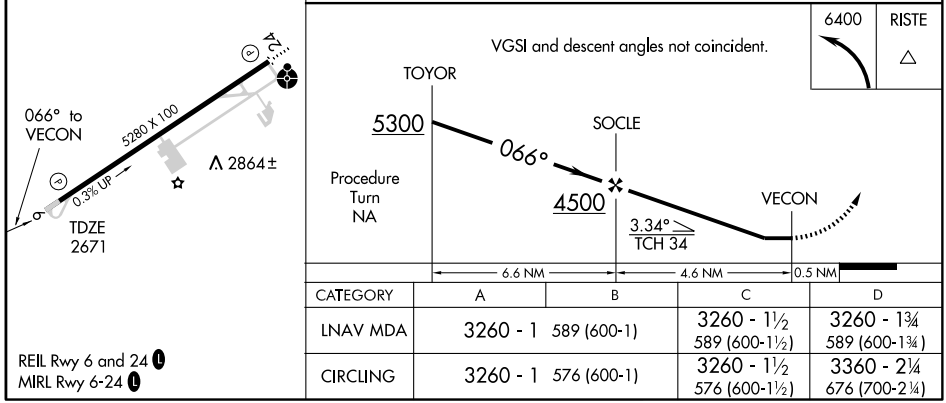
WISE/ LONESOME PINE (LNP)

If local altimeter setting not received, use Virginia Highlands altimeter setting and increase all MDAs 160 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 6400 direct RISTE and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.6	126.57 253.5	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	3260 - 1 589 (600-1)		3260 - 1½ 589 (600-1½)	3260 - 1¾ 589 (600-1¾)
CIRCLING	3260 - 1 576 (600-1)		3260 - 1½ 576 (600-1½)	3360 - 2¼ 676 (700-2¼)

REIL Rwy 6 and 24 L
MIRL Rwy 6-24 L

WAAS CH 77602 W24A	APP CRS 242°	Rwy ldg 5280 TDZE 2684 Apt Elev 2684

RNAV (GPS) RWY 24

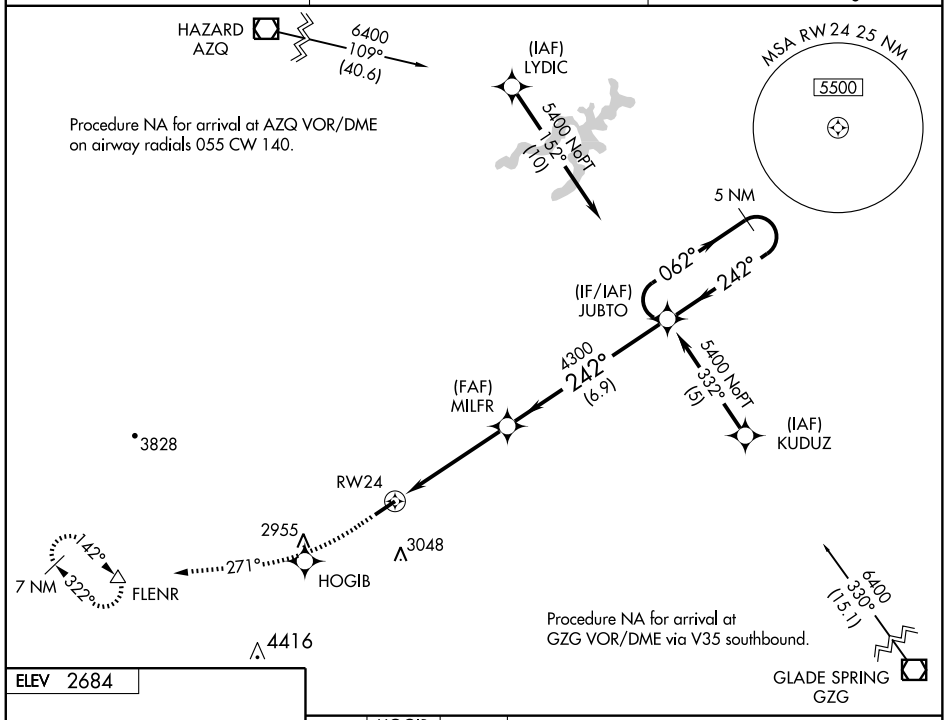
WISE / LONESOME PINE (LNP)

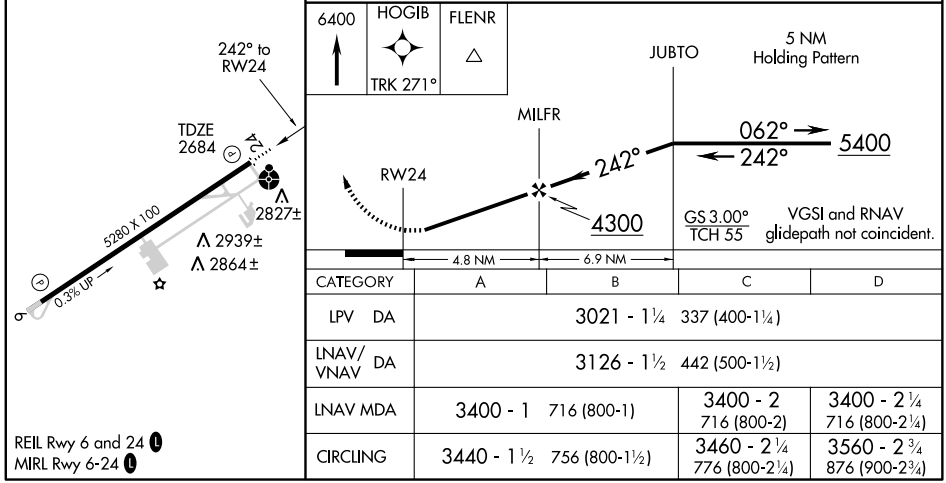
Inoperative table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (110°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

ODALS

MISSED APPROACH: Climb to 6400 direct HOGIB and via 271° track to FLENR and hold, continue climb-in-hold to 6400.

AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.6	126.57 253.5	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	3021 - 1¼ 337 (400-1¼)			
LNAV/VNAV DA	3126 - 1½ 442 (500-1½)			
LNAV MDA	3400 - 1 716 (800-1)		3400 - 2 716 (800-2)	3400 - 2¼ 716 (800-2¼)
CIRCLING	3440 - 1½ 756 (800-1½)		3460 - 2¼ 776 (800-2¼)	3560 - 2¾ 876 (900-2¾)

REIL Rwy 6 and 24 L
MIRL Rwy 6-24 L